Lecture
ON THE
RESULTS OF INFLAMMATION OF THE MIDDLE EAR.

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GENTLEMEN,—Of the ten specimens of temporal bones (with the history of the case attached to each) which I shall ask you to examine at the conclusion of the lecture, nine were removed after death from patients who had died from cerebral abscess, meningitis, or pyæmia. In seven of these you will observe that the bone is more or less diseased; in two the bone appears to be healthy; but in all, the tympanic membrane was either absent or perforate. In the tenth case the bone, which I removed in 1875 from a child twenty months old, represents (although as a mere shell) the whole of the temporal bone. The subject of this specimen when I last saw her, three years ago, was alive and well, without of course any hearing, and with complete facial palsy on the affected side. Such are amongst the most serious results of disease of the middle ear. This cavity, as you are all aware, commences at the faucial openings of the Eustachian tubes, is closed at the other end by the tympanic membrane, and is lined throughout by a delicate mucous membrane that is continued into the mastoid cells.

I propose to-day to give you an account of the course and various terminations of the inflammatory process when this tract of mucous membrane is the area affected. These effects are most numerous; indeed, they vary between a slight attack of pain causing a passing deafness, to a series of symptoms which terminate in a few days with the death of the patient. No one who is engaged in the active practice of his profession can pass many years of his life without having his attention directed to the constantly fatal endings of some of these cases, unexpected alike by the patient or his friends; and it is well that each one of you should be possessed of a more or less intimate knowledge of the conditions which bring these endings about.

Consider for a moment the structures which this mucous membrane covers, and you could almost map out for yourselves some of the probable results of acute inflammation affecting it. Let us to-day do this together, and we shall see how accurately what might happen does in truth really occur, and then I will say a few words on each lesion in detail. The posterior nares being in close proximity to the orifice of the Eustachian tubes, you might expect that any catarrhal affections which involved the posterior nares would probably give rise to a swelling of these openings. Thus the air which habitually passes through the Eustachian tubes would be at once stopped; next, an excess of mucus throughout the tube leading into the tympanum, or one step further, and the inflammatory products of inflammation, such as bands of adhesion and anchylosis of the ossicles, thickening of the posterior wall, each and all giving rise to failure in the conduction of sound. But supposing the inflammation to have proceeded so far as the formation of pus, this must make for itself a mode of escape; and as in the process of ulceration the part which suffers is that which offers the least resistance, the tympanic membrane naturally would become affected. At the same time, it might be quite possible, before such a mode of egress took place, that complete disorganisation of the contents of the tympanum might occur, and the death of the bone within the cavity ensue. Thus we should at once have the condition which obtains in all fistulous openings—that is, air is admitted into a cavity (in this case into the cavity of the tympanum) which in health is protected from the air, causing a constant purulent discharge from the mucous membrane—in other words, a discharge from the ear. Then all the morbid growths which habitually invade such surfaces might be expected—such as polypus, &c. But supposing the matter proceeded in another direction—namely, into the mastoidic cells—there would be mastoid abscess; or through the roof of the tympanum, and in this case cerebral abscess or meningitis would follow. Another route would be through the internal auditory meatus or into the lateral sinus, causing pyæmia. You know that in the tympanic cavity the facial nerve lies protected by bone. Thus, in the progress of inflammation of the tympanum, facial paralysis might be expected, and it is a very common result. Lastly, purulent matter might pass under the tissues over the mastoidic process, and so into the neck or under the scalp. You will naturally wish to know in what subjects these affections chiefly occur, and with what acute diseases are they mostly associated. Do they occur in healthy persons, and at what times do symptoms dangerous to life manifest themselves? To-day, however, only a brief outline of the course of these symptoms and of their treatment will be possible.

In speaking of catarrhal affections of the ear it is usual to divide them into two kinds—namely, the non-purulent and the purulent—and for the purposes of description this is extremely convenient, though in actual practice the one very often is found to merge into the other. To begin with the first symptom which I mentioned—namely, obstruction of the Eustachian tube—the subjects of this affection are in the great proportion of cases children, and their aspect is very characteristic; the mouth is open, they evidently breathe with great difficulty through the nose, and the look is altogether very vacant. They belong mostly to what is termed the strumous type, and the tonsils are generally found to be very much enlarged. These children will remain for many years extremely deaf, the hearing varying as they get cold or not, but at no time being perfect. The moment that air is injected artificially into the middle ear by Politzer's plan the hearing is restored to the normal condition. The most essential part of the treatment consists in the relief of the catarrh of the posterior nares by the injection through the nostrils of alkaline solutions. This, together with the occasional use of Politzer's inflation, is all the treatment that is generally necessary, but when it is possible the habitual residence in a dry climate is most desirable. For the removal of the tonsils the following will be found the best—for practical purposes—namely, that where they are found to interfere with the respiration they should be removed, and where they do not do so they should be allowed to remain; for unless the body of the gland has undergone change they often become smaller after the age of puberty. Obstruction of the Eustachian tube is an affection not altogether confined to children. Adults may become the subject of it, but with them it happens that the one side is affected as often as both.

With regard to the mucus in the tympanum and the inflammatory products which interfere with the conduction of sound, it is sufficient for me here to say that when injections of fluids or vapours into the cavity of the middle ear are mentioned, and the very occasional practice of incision of the tympanic membrane (a practice that should never be indulged in except by those who have very large and extended experience), the general course of treatment necessary in these cases will have been indicated.

But when we come to perforation of the tympanic membrane there is a great deal more to be said. Perhaps the most numerous class of cases that flock the out-patient's room, or that apply for relief in other ways for affections of the ear, will be found to be the subjects of perforation. Even without an inspection of the membrane it is quite possible to diagnose the affection. The fact of the discharge from the ear, added to another fact—namely, that by holding the nostrils the patient so suffering can expel air through the opening, will suffice to settle the point as to whether the membrane is perforated or not. The most frequent cause of this trouble is, of course, scarlet fever, or any of the other exanthematous fevers, during the course of which the middle ear constantly becomes the seat of inflammation. But without any of these serious troubles an ordinary catarrh is enough to bring about this. When the tympanic membrane is inspected the appearances of perforation are various in the extreme. At one time a minute opening, such as might be made by a pin, is all that can be seen; whilst at another there is nothing whatever to be seen of the membrane, but the cavity of the tympanum is full of red granulations. The lower portion of the membrane at one time represents an opening in the shape of a kidney; at another time half the membrane on one side will be lost, the handle of the malleus forming the border line. I could mention many more, such as double perforations, loss of

malleus entirely, or its handle. It must not be supposed that the size of the perforation bears any kind of relation to the amount of hearing which is lost. Excellent hearing will very often be found together with complete loss of the membrane, whilst at other times with a very small perforation there is intense deafness, the real reason of the loss of hearing being not the opening in the membrane itself so much as the disorganisation behind it.

With regard to the treatment of perforations, not only is it necessary to know what should be done, but it is infinitely more necessary to know what should not be done. Absolute cleanliness, which can be obtained by syringing with warm water, must precede any local application, and it may at once be said that mineral astringents, which are so commonly made use of for the purposes of checking the discharge, are not only useless, but absolutely dangerous. The discharge will indeed be stopped by such solutions, but no sooner is the application discontinued than the discharge returns. Vegetable astringents, or sometimes weak solutions of alcohol, are found more useful; but no especial application can be prescribed for perforations generally. The state of the perforation at the time will suggest to the experienced what is the most appropriate application. One of the principal objects of treatment should be to keep the cavity of the tympanum free from secretion, and this can only be done by the matter being expelled through the opening by blowing with the mouth and nose closed. This should always be done whilst the ear is being syringed. By far the best method of treatment is the one which imitates in the nearest manner possible the conditions which obtained before the membrane was perforated, and that will be the protection of the cavity of the tympanum from the accession of air. This can be achieved by some form of what is often termed an artificial membrane, and amongst the best kind is one which the patient can use for himself—namely, the application of a moistened pad of cotton-wool. This has a twofold effect: in the first place, when the membrane has gone, the pressure throughout the chain of ossicles has been lost, and the pad of wool forms a support to the malleus, and consequently through the other ossicles on to the stapes, very much in the same way as this support was given by the membrane when entire. Thus the hearing is in a great number of instances very much benefited. No special shape can be laid down as a rule for this. Whilst one form will be most useful for one perforation, another form will be necessary for another; and after a little practice the patient will be able to dictate to the surgeon what is the precise amount of pressure that will give the best hearing. But this method of treatment is not only useful in restoring the proper amount of pressure upon the stapes, but it is also of infinitely more service in the local effect which the protection from the air has upon the mucous membrane which lines the cavity of the tympanum. Very often under this management the discharge will gradually decrease until it is reduced to a minimum, and the chances of the ulterior disastrous effects which have been mentioned will be lessened. By the inspection of a perforation it can never be said, even by the most experienced observer, whether the case under notice is one in which artificial support will give good or improved hearing. It must be tried, and it must be tried in various forms, and even if the first application is not successful it still may be quite possible that subsequent ones will give hearing of a very superior character. To all this I must add that some cases are quite intolerant of any interference. If mineral astringents are to be avoided in the treatment of perforation, still more necessary is it to guard against the entrance of sea water into the ear. When I tell you that I have known several cases in which pyæmia and cerebral abscess have followed the application of nitrate of silver or the entrance of sea water into the ear, I need say no more upon this head.

Any day that you go into the out-patients' department you will be able to see plenty of cases of polypus of the ear. A round fleshy tumour very often fills the meatus and protrudes from it, but it is sometimes necessary to make use of the speculum to detect these growths. By far the most usual position from which they spring is the mucous membrane of the tympanic cavity. Their structure is chiefly fibro-cellular. Under the microscope it represents fibrous tissue in the course of development. In proportion as the cells or fibrous tissue predominate, so will the growth be softer or harder. In almost all cases it is necessary that these growths should be removed, not only on account of the unhealthy condition of the tympanum which they keep up, not only on account of the obstruction to sound which they form, but because, by preventing the egress of discharge from the cavity of the tympanum, they may, and indeed do, become the immediate cause of death. Besides the fibro-cellular growths which I have removed, some have under the microscope appeared to be myxomatous, and on two occasions I have removed what appeared to be a round-celled sarcoma. To take away a polypus without the most careful after-treatment is not only useless but it is cruel, for the moment it is removed it commences to grow. It is therefore necessary that the roots of the growth should be thoroughly destroyed, and the perforation be treated according to the ordinary rules in such cases.

The next most serious complication—namely, inflammation in the mastoid cells—is indicated by the following symptoms. Intense pain over the mastoid process, redness, swelling, and pitting upon pressure. Whenever these symptoms occur you will do well to make an incision in the mastoid process about an inch from behind the ear, and if you do not arrive at matter by this means, and if you have reason to expect that there is pus within the mastoid cells, and especially if a distinct rigor has taken place, you must not hesitate to perforate them. This can best be done by a drill which is so protected that you can measure the distance to which the bone is perforated. As the operation proceeds you should place a probe into the wound until the cells are reached, and the next day the patient, by closing the mouth, nose, and external meatus of the ear, will be able to expel the matter through the wound. I do not hesitate to say that if this operation is done in appropriate cases, many lives will be saved. No such determined proceeding of course is necessary in the case of children, as the bone is extremely friable, and can be readily broken into by a stiff probe.

With regard to facial paralysis, although a very large proportion of the cases are those in which the whole contents of the tympanum have undergone disorganisation, and death of the bone has taken place, such as happens in the case of scarlet fever, it is by no means necessary for complete paralysis that so serious a condition should have occurred. It is quite possible that a person in ordinary health may suffer from considerable earache, lasting perhaps for only a few hours, and yet the facial nerve be paralysed, notwithstanding the fact that the inflammatory process has not been so severe as to cause even the rupture of the membrane. You may well ask the question why should one person get facial paralysis from so trivial a reason, and so many hundreds who have had far more serious trouble escape. I believe the correct explanation is as follows—namely, that that portion of bone which protects the facial nerve, and which, as you know, is called the aqueduct of Fallopius, is very much thinner in some subjects than it is in others, and in a great many it is perforated. You can well understand, therefore, how the products of inflammation pressing upon the nerve will cause its loss of function. When the bone has died and the contents of the tympanum have been evacuated during the suppuration, you may take it as a rule that the recovery from this paralysis never can possibly take place. However, where the tympanum is not perforated you may look forward to a complete recovery in a period of time to be measured by months. It is rather questionable if any treatment beyond time is necessary for this recovery, but I have an impression that the old-fashioned remedy of blistering behind the ear does actually have some sort of effect in hastening the recovery. In the opinion of some competent observers the continuous current is thought to be useful.

We now come to the most serious part of the subject—namely, those cases which are fatal from inflammation within the cranium or from pyæmia. Those which you will have the opportunity of seeing in the hospital are generally in a considerably advanced state—namely, the patient is delirious, is tossing from side to side, has all the usual symptoms of constitutional disturbance: increased temperature, a furred tongue, and a rapid pulse. A few days generally suffice for such a patient to pass into a state of coma, followed shortly by death. If you look at the post-mortem books you will find that the condition of things after death is pus between the skull and the dura mater, pus beneath the arachnoid, or abscess in some portion of the brain. But in all probability, in your practice, when you are sent for, the earlier stage of this condition will be what is

presented to your notice. I could almost place these fatal cases into two divisions, the first being that in which a patient in ordinary health is seized with acute pain in the ear, followed in a few days by a discharge, a severe rigor, restlessness, pains in the head, and constitutional disturbance, the whole illness occupying not more than a few days. In the other division patients generally have been the subjects of a discharge from the ear for many years before the acute symptoms have set in, and these do set in without apparently any reason. It is no unusual thing for a man to have a perforation of the tympanum twenty, thirty, or even forty years, and without any reasonable cause, so far as we can judge, without any local application to the ear, without any fresh cold, to be seized with a rigor and the usual train of symptoms we are considering. No doubt a certain proportion of such patients are discovered after death to be the subjects of caries in the temporal bone, but this is by no means always the rule, as you may see by the specimens before us. I am bound to say that in all the fatal cases which I have seen (and I am sorry to say they are very numerous) not all of them had any diseased bone. So you may take it as an accepted fact that anyone who is the subject of perforation of the tympanic membrane, whatever his age or whatever his condition, is in more or less peril of his life—a peril which is certainly greater if the bone is diseased than if it is not, but still in all cases a peril. It ought to be always present before you that whenever you are taken to a case in which the patient is delirious, without it is one in which it is perfectly obvious that the delirium is one connected with a fever, your first inquiry should be, Has this patient now, or has he at any time been known to have had, a discharge from his ear? And this, indeed, is so necessary that it is the commonest thing in the world for a patient to so simulate the symptoms of typhoid fever that no disease of the ear or inflammation of the brain or its membrane is suspected even until after death.

If you ask in what way do the symptoms of meningitis differ from those of cerebral abscess, I should say that it is very often impossible during life to be in any degree certain, but I have noticed that in those patients who have been dying of meningitis the delirium has come on much more early, and is much more severe, and the whole illness has occupied a much shorter time than in cases in which cerebral abscess has taken place. Indeed, I have known persons who must have had cerebral abscess, as shown by post-mortem examination, to have been perfectly rational for many weeks, although the abscess must have been actually formed at the time. I can well remember an old man with a perforation who suffered the most agonising pain in his head for over five weeks. He suddenly tumbled down, became comatose, and died the next day, and at the post-mortem examination an abscess was found in the substance of one of the hemispheres of the brain, which, from its appearance, must have lasted a very considerable time, and yet up to the time of the fit his mind was in no way affected. Meningitis, therefore, may be said to be a disease in which the delirium is much more vigorous and the course is much more rapid than in cerebral abscess. There are, however, a certain train of symptoms which, when they appear in a subject of perforation, ought to attract the gravest apprehension, and they are head pains and giddiness. Although these two symptoms are often present with certain others of cerebral irritation, they will last for a short time, and then pass away if they are due to cerebral irritation only. The fact of many people who die eventually of meningitis having had such attacks several times before the last one takes places should make anyone who attends much upon such cases very ready to recognise the possible dangers which are present. I have attended a patient on no less than three occasions at intervals of several years with very serious symptoms of cerebral irritation, from all of which she recovered, and eventually she died of cerebral abscess; and in looking at my case-books the other day, and endeavouring to recall to my mind the particulars of a large number of fatal cases, I was very much struck by the fact that in a great many more of them than I had supposed the patients had had very unpleasant symptoms more than once before the last attack took place. After what I have said I need hardly add that you should be very careful in insuring the life of anybody who has a perforation of the tympanic membrane, and, indeed, it is a danger which those who are in the habit of examining patients for life insurance are now very fully aware of, although I can well remember the time when very little notice was paid to the fact that patients who presented themselves for insurance had a history of a discharge occasionally from one or both ears.

Another complication of perforations are abscesses external to the ear—that is, beginning outside the mastoid process—involving the death of the outer table of the bone and matter spreading in various directions. Some of the more general routes which pus takes when it forms outside the mastoid process are the following:—Under the scalp beneath the tendon of the temporal muscle and into the temporal fossa, or down the muscles of the neck, along the edge of the sterno-mastoid muscle, and sometimes finding its way upwards into that portion of the external meatus where the bone joins the cartilaginous portion. This route was once taken in the case of an old man whom I saw, in which the drainage-tube which I eventually inserted passed between the clavicular portion of the sterno-mastoid along the border of this muscle and eventually out through the external canal of the ear. It is no use expecting that one opening in any of these cases will be sufficient. The first opening, of course, must be made over the mastoid process; but it will be constantly necessary for you to make a counter-opening, and the position of this counter-opening must be determined by the direction in which you are able to pass a probe into that wound. I need hardly tell you that the more dependent this second opening is the better chance of rapid recovery the patient will have. The most serious direction which pus can take in cases of this kind, and one which happily does not often happen, but which has occurred on more than one occasion within my experience, is beneath the sterno-mastoid muscle in a backward direction. The tediousness of these cases is very great, and the pain the patients endure is terrible, but nothing short of a complete drainage will give relief.

ON THE

PHYSIOLOGY OF THE CARBOHYDRATES IN THE ANIMAL SYSTEM.

BY F. W. PAVY, M.D., F.R.S.

(Continued from page 60.)

Situation of Converting Principle.

AT first I took it for granted that the probable seat of the active principle which had effected the transformation of glucose into a product of lower cupric-oxide reducing power was in the epithelial surface of the mucous layer. Under this impression I operated with the scrapings from the surface of the mucous membrane. The idea has proved to be erroneous, but it occasioned me for some time a considerable amount of embarrassment through the want of constancy and positiveness in my results. I generally, but not invariably, obtained a sufficiently marked effect, especially when a large quantity was used with the scrapings from the stomach and intestine of the rabbit; but in the case of the other animals that I tried—pig, sheep, horse, cat, and dog—my results were such as to lead me to consider that no action which could be regarded as of physiological significance was exerted. Such a conclusion, however, was difficult to accept; for I had ascertained in some of the animals mentioned, as I shall subsequently bring forward experiments to show, that when grape sugar was introduced into the stomach it reached the portal vein not as glucose, but as a body of about the cupric-oxide reducing power of maltose. I have since dealt with the entire coats of the stomach and intestine of the pig, cat, and dog, used after being finely cut up with scissors, and have found marked transformative action exerted. I have not made any precise comparative observations, but from what I have seen I am under the impression that the stomach and intestine of the rabbit act more energetically than the stomach and intestine of the other animals I have tried. It also appears to me that the stomach acts more energetically than the intestine, and in some instances I have decidedly noticed that the effect produced has stood in relation to the amount of fermentative material used.

A review of my experiments led me to take the entire walls instead of the scrapings from the inner surface, and I then obtained the results which have been already described. I have, however, tested the question experimentally by

operating with the scrapings and the deeper part separately, and the results show in a decided manner where the active principle is situated. Perhaps the reason of my formerly getting positive results to the extent I did with scrapings from the stomach and intestine of the rabbit was on account of the delicacy of the structures in this animal leading to more or less of the deeper part being removed with the superficial.

Experiment.—The cleansed stomach of a recently killed rabbit was divided into two longitudinal halves along the curvatures. One-half was used entire, and after being minutely divided was placed in a beaker with about 50 cub. centims. of water. The other half was lightly scraped upon the surface, and the scrapings also placed in a beaker with a similar quantity of water. The remaining deeper portion was finely divided, and then disposed of in a like manner. Into each beaker 10 cub. centims. of a solution of grape sugar containing ·142 grm. of glucose were placed, and the products were then exposed side by side for two hours to a temperature of 120° F. (48·8° C.)

The intestine was also at the same time dealt with in a similar way, and the subjoined figures show the results that were obtained :—

Entire Walls of the Stomach.

	Cupric-oxide reducing power expressed as glucose.
Before sulphuric acid	·102 grm.
After ,, ,, ...	·134 ,,

Scrapings of Inner Surface.

Before sulphuric acid	·134 grm.
After ,, ,, ...	·134 ,,

Part left after Removal of Inner Surface.

Before sulphuric acid	·100 grm.
After ,, ,, ...	·134 ,,

Entire Walls of the Intestine.

Before sulphuric acid	·118 grm.
After ,, ,, ...	·138 ,,

Scrapings of Inner Surface.

Before sulphuric acid	·142 grm.
After ,, ,, ...	·138 ,,

Part left after Removal of Inner Surface.

Before sulphuric acid	·118 grm.
After ,, ,, ...	·138 ,,

Situation of the Converting Principle in the Ruminant Animal.

This calls for special consideration. In the course of my experiments I tried the stomach (true or fourth) and intestine of the sheep, and was astonished to find that no conversion took place. I was at a loss to understand that a vegetable feeder like the ruminant should thus be unprovided with the converting principle existing even in the alimentary tract of the carnivorous animal. This led me to experiment with the other portions of the ruminant stomach, and the results at once showed that the sheep is exceptional only in the position in which the converting principle is to be found. Whilst absent in the fourth or true stomach and the intestine, it is present in the paunch, reticulum, and the many-plies or third stomach. It is really interesting to note that this condition of things should exist and stand so strictly in accord with what seems reasonable to look for under the altered circumstances. Instead of what is swallowed passing at once into the stomach and thence into the intestine as ordinarily occurs, the disposition in the ruminant is such that the food when first swallowed passes into the paunch and reticulum. Here it is delayed for some time and a favourable position afforded for the absorption of a diffusible substance like glucose. From these two stomachs the food is then regurgitated into the mouth, and after thorough comminution, swallowed a second time and conveyed to the many-plies or third stomach. By the arrangement existing in this cavity with its numerous laminæ or folds, disposed like the leaves of a book, an extensive surface is passed over by the comminuted food before the fourth or true stomach is reached. Thus the paunch, reticulum, and many-plies are traversed by the food in such a manner that absorption of any glucose present is likely to occur before the true stomach is reached, and observation shows that the converting principle exists in the paunch, reticulum, and many-plies, and not in the true stomach and intestine as in non-ruminant animals.

Subjoined are the results illustrative of what I have said :—

Experiment.—Portions of the four stomachs and the small intestine of a recently killed sheep were taken for the experiment. Finely divided portions of each were placed in separate beakers, and about 50 cub. centims. of water added, and then 10 cub. centims. of a solution of grape sugar, containing ·128 grm. glucose. The beakers were exposed side by side for two hours to a temperature of 120° F. (48·8° C.), and afterwards allowed to remain for eighteen hours at the ordinary temperature. The analyses were now conducted, and the following results obtained :—

Paunch.	Cupric-oxide reducing power expressed as glucose.
Before sulphuric acid	·074 grm.
After ,, ,, ...	·128 ,,

Second Stomach (reticulum).

Before sulphuric acid	·082 grm.
After ,, ,, ...	·124 ,,

Third Stomach (many-plies).

Before sulphuric acid	·110 grm.
After ,, ,, ...	·128 ,,

Fourth Stomach (reed or true stomach).

Before sulphuric acid	·124 grm.
After ,, ,, ...	·130 ,,

Intestine.

Before sulphuric acid	·124 grm.
After ,, ,, ...	·124 ,,

The Portal Blood after the Ingestion of Grape Sugar.

An examination of the portal blood after the introduction of glucose into the stomach of a fasting animal may be considered as furnishing evidence of what has actually taken place during life. The experiments I have previously referred to have shown that glucose is moved into a body of lower cupric-oxide reducing power by the agency of certain parts of the alimentary tract. The power to produce the change has been shown to belong to certain parts of the alimentary tract, but something more is wanted to prove that such change actually occurs as a phenomenon of life. The mode of experimenting now under consideration supplies this proof. A solution of glucose is introduced into the stomach of a fasting animal, and the animal afterwards killed, and the portal blood which contains the products of absorption from the alimentary canal collected and examined. If glucose were absorbed unchanged, glucose should be encountered in the portal blood, but observation, as will be seen by the experimental results adduced below, shows that instead of glucose a product of lower cupric-oxide reducing power than maltose is present. Thus everything conspires to indicate that upon entering the system glucose is moved into a body of lower cupric-oxide reducing power. Such must be spoken of as constituting the first step towards the assimilation or appropriation of this principle within the system. Subjoined are the details of four experiments, two upon the herbivorous and two upon the carnivorous animal.

Experiment.—One ounce (28 grms.) of grape sugar dissolved in three ounces (85 cub. centims.) of water was injected through a flexible tube passed down the œsophagus into the stomach of a rabbit which had not been fed for twenty-eight hours. One hour and a quarter afterwards the rabbit was killed, and the abdomen immediately opened, and the blood collected from the portal vein. The blood was prepared for examination in the usual way by pouring it into spirit, and dealing with the alcholic extract by evaporating off the spirit and treating the residue with sulphate of soda. The following are the results that were obtained expressed as parts per 1000 :—

Portal Blood.

Before sulphuric acid	2·222 per 1000
After ,, ,, ...	5·444 ,,

Relation 40 to 100.

Experiment.—Half an ounce (14 grms.) of grape sugar dissolved in three ounces (85 cub. centims.) of water was

injected into the stomach of a rabbit which had not been fed for twenty-four hours. The rabbit was killed at the end of half an hour, and the portal blood collected and analysed.

Portal Blood.

Before sulphuric acid	... ...	1·700 per 1000
After " "	... ...	3·400 "

Relation 50 to 100.

Experiment.—Five hundred grains (32 grms.) of grape sugar dissolved in one ounce and a half (43 cub. centims.) of water were injected into the stomach of a dog which had not been fed for twenty-four hours. In twenty-five minutes' time the dog was killed, the abdomen immediately opened, and the portal blood collected and analysed. Duplicate analyses for the sake of check were made, and the following are the figures that were yielded:—

Portal Blood.

OBS. 1.	Before sulphuric acid	...	1·200 per 1000
	After " "	...	2·233 "

Relation 53·7 to 100.

OBS. 2.	Before sulphuric acid	...	1·200 per 1000
	After " "	...	2·200 "

Relation 54·5 to 100.

Experiment.—Five hundred grains (32 grms. of grape sugar dissolved in one ounce (28 cub. centims.) of water were injected into the stomach of a dog which had not been fed for twenty-four hours. The dog was killed at the end of twenty minutes, the abdomen immediately opened, and the portal blood collected. The blood from the right ventricle was also collected, and both submitted to analysis. The right-ventricular blood will be seen to have contained glucose, and in about the usual amount—viz., about 0·5 per 1000.

Portal Blood.

Before sulphuric acid	... ...	0·866 per 1000
After " "	... ...	1·666 "

Relation 51 to 100.

Right Ventricle Blood.

Before sulphuric acid	... ...	0·466 per 1000
After " "	... ...	0·466 "

Extent of the Conversion of Glucose.

Reference to the preceding results will show that in the change which glucose undergoes it is moved not only as far as maltose, but into the position of considerably lower cupric-oxide reducing dextrins. When a reducing power above 61 against 100 for glucose is presented, it may be that we have a mixture of maltose and glucose to deal with, although I have nothing absolutely before me to enable me to state that such is actually the case, for it may be possible that there are products with a reducing power standing between maltose and glucose, just as there are products—the dextrins—with reducing powers below that of maltose.

The lowest point to which in my observations upon the alimentary tract I have yet noticed glucose to have been moved is into a product with a cupric-oxide reducing power of 40 as compared with glucose at 100.

In an experiment just performed, a moderately strong solution of glucose was exposed in contact with a considerable quantity of the previously dried stomach of the rabbit to a temperature of 120° F. (48·8° C.). Fifty cub. centims. of the liquid were removed for analysis at the end of one hour, and another 50 cub. centims. at the end of two hours. The two portions yielded on analysis identically the same figures, showing that the point attained represents the full amount of working power derivable from the active principle present, and that after an hour no further action was exerted. The figures stood as follows:—

	Cupric-oxide reducing power expressed as glucose.
Before sulphuric acid	·082 grm.
After " "	·188 "

Relation 43 to 100.

As I have stated, the dried stomach was here employed. The stomach may be inflated and dried, and thus preserved for use. It is necessary, however, that self-digestion should not have been allowed to advance after death. Unlike the active principle of digestion—pepsin,—which does not undergo self-digestion, the active principle concerned in the transformation of glucose is susceptible of being destroyed by the agency of gastric digestion. At least so it appears from the results that have presented themselves to me.

The intestine also may be similarly inflated and dried, and thus kept for use. It answers as well for experiment in this as in the fresh state.

(To be continued.)

FOUR CASES OF

NEURALGIA OF THE SCIATIC NERVE SUCCESSFULLY TREATED BY GALVANISM.

BY W. E. STEAVENSON, M.B. CANTAB., M.R.C.P.,
CASUALTY PHYSICIAN AND ELECTRICIAN TO ST. BARTHOLOMEW'S HOSPITAL.

ELECTRICITY has long been known as a useful remedy in the treatment of sciatica, but its action is supposed to be uncertain. It is very possible that some cases may not yield to treatment. In the few cases in which I have used galvanism—viz., six—it has invariably been successful; but possibly something may be due to the way in which it has been applied. I have therefore in this paper given the details of four cases, and described the mode of treatment followed in each. The two other patients I have had are women. One has only just ceased to attend; I am therefore not quite sure whether the relief will be permanent. The other is still under treatment, having been galvanised three times; she has been suffering from sciatica since August, but is now almost well.

CASE 1.—G. B——, aged forty-five, was admitted into Matthew ward, in St. Bartholomew's Hospital, under the care of Dr. Southey, on February 19th, 1883, suffering from sciatica on the right side. He had had rheumatism ten years ago, for which he had also been an in-patient of the hospital. He had enjoyed fairly good health up to about Christmas, 1882. At that time he was working in damp ground and felt a numbness in the back of his leg. Some time later he had pain down the back of the right thigh. It hurt him to rise from his chair. Most of the usual remedies and liniments for treating sciatica were tried in this case. On March 3rd, as the patient's condition did not improve, Dr. Southey asked me to treat him by galvanism. The patient was allowed to lie on his bed and only the back of the right leg uncovered. A wet pad of metal and amadou connected with the positive pole of a Coxeter's constant current battery was placed on the abdomen and held in position by the patient; and a carbon disc electrode covered with chamois leather connected with the negative pole was moved gently up and down over the course of the great sciatic nerve. The skin was previously moistened with warm salt and water, as were also both electrodes. The negative pole was used over the nerve, as it possesses greater caustic effects than the positive. Twelve cells were as many as the patient could bear without giving him severe pain. The number was therefore not exceeded, and the application lasted for about ten minutes.—March 4th: Less pain in the hip. Pain much the same in the leg and foot.—5th: Less pain in the hip, leg, and foot. The leg and foot were not galvanised, only the sciatic nerve.—12th: Has been galvanised daily and has improved rapidly.—22nd: Has been up and about the ward for several days. Has no pain now but a little stiffness.—April 2nd: Discharged well.

CASE 2.—A member of the staff of the hospital, between thirty and forty years of age, was seized with pain in the lower part of the back on Monday, June 25th. He at first thought it was caused by a strain received whilst riding, but the pain gradually passed down in the course of the great sciatic nerve on the right side. The patient had suffered from a previous attack of sciatica about three years before, which lasted several months. The present attack was accompanied with great pain on the slightest twisting or bending of the body at the hip. Rising from the recumbent or sitting position was accomplished with great difficulty. He was unable to put on his boots. The most acute pain was limited to what from position appeared to be the lumbo-sacral cord. On June 28th, the pain and difficulty on rising from a seat having increased, the patient submitted

to the application of galvanism. A pad connected with the positive pole of a battery of Coxeter's elements was applied to the abdomen, and the course of the great sciatic nerve rubbed with a carbon disc electrode covered with chamois leather. The skin and electrodes were moistened with warm salt and water. The application was continued for eight minutes. At first ten cells were used, and then increased up to sixteen, and again reduced to twelve before the conclusion of the *séance*. The application was followed by marked improvement, which lasted more or less for the rest of the day. The application was made about half an hour before noon. For the first two hours the relief experienced agreeably surprised both patient and operator. Galvanism was applied in the same manner on the following three or four days, each time with an improvement in the symptoms. No greater number than sixteen cells were used at any time, nor was the application prolonged for more than ten minutes. At the end of ten days from the commencement of the attack my patient was quite well again, the former visitation having lasted for ten weeks at least.

CASE 3.—Simultaneously with the above I was asked to treat the case of a man sixty-two years of age, who had formerly been a beadle in the hospital. He was now in Matthew ward, under the care of Dr. Southey. He was admitted into the hospital on June 25th, 1883. He had been taken ill with pain down the back of the right thigh on June 9th. He was able to follow his employment for a week, and then for a week before admission the pain had been so great that he had been obliged to lie up. He was scarcely able to walk on account of the pain. No cramp or numbness. He had had medicine and liniment, but without giving him much relief. When I saw him on June 26th, there was great tenderness over the right sciatic nerve, but no pain below the knee. Dr. Southey wished him to be galvanised for three successive days, in a bath.—June 27th: Placed in a bath, temperature 100°. The positive electrode was left hanging in the water, but not in contact with the patient, and the negative electrode applied to the course of the great sciatic nerve. It was found that a much larger number of cells (twenty-two) had to be used to influence the patient, as no doubt the water carried off a large amount of the electricity. — 28th: Better since the bath and galvanism. — 29th: Still improving. — July 2nd: Rather more pain to-day, not having been galvanised since June 29th. — 7th: Galvanised again to-day in a bath, to the water of which salt had been added; no effect was felt by the patient even when the full strength of the battery was put on—viz., forty cells. The salt and water conducted the electricity entirely away from the patient; he was therefore taken out of the bath, dried, and placed in bed, and galvanised in the manner I have described as adopted in the two preceding cases.—8th: Feels distinctly better for the galvanising yesterday; is to get up; galvanised again to-day.—10th: Not galvanised since the 8th; stiffness and numbness going off.—16th: No numbness or pain.—17th: Discharged well.

There seems to be no advantage gained by making the application of the galvanic current in a bath; in fact I prefer that a patient should not be so immersed. Less pain appears to be caused to the patient, but I found that a greater number of cells had to be used. No doubt the water carries off a large amount of the electricity; so much so that when a salt and water bath is used the patient feels nothing when the strongest current is employed, a current quite unbearable when out of the water.

CASE 4.—F. G——, aged fifty-four, a scripture reader, was transferred to me as an out-patient by Dr. Herringham. He had suffered more or less from sciatica since October, 1882. The pain passed down the course of the right sciatic nerve. He also suffered from some lumbago, and complained of great pain seizing him at times about the region of the right sacro-iliac synchondrosis. He came under my charge about the middle of August last, and was galvanised six times. At the first application nineteen cells were used. He felt better for some time after the application, but expressed himself as not materially improved when he presented himself on the second occasion. This patient is the only one out of the four who did not feel decidedly better from the first application.—Aug. 17th: Twenty-two cells were used on this occasion, followed by marked relief. The patient was a fat man, and therefore offered more resistance to the passage of the current than was the case with the others, whose treatment I have described. The number of cells used at each application was therefore proportionately increased. During the next week he suffered from a severe attack of dyspepsia, but the sciatica continued to yield to the galvanism. On August 31st his attendance ceased, as he had to go as a scripture reader to one of the hop-picking districts. He described his sciatica as all but gone, but was still suffering at times from indigestion.

In these four cases galvanism was used with marked benefit. The current, from modified Leclanché cells, was applied about as strong as the patient could bear it. The number of the cells used varied in the different cases. A small plate electrode attached to the positive pole of the battery was, in each case, placed upon the abdomen, and a circular disc of compressed carbon covered with chamois leather attached to the negative pole was rubbed up and down the course of the sciatic nerve and over the lower part of the spine, without regard to the direction of the current. The application lasted at each *séance* for eight to ten minutes, and the integument over which the electrode had passed was suffused with a bright blush, the patient experiencing a glowing feeling of warmth in the same track. The stiffness of the muscles was also relieved, and the patient was able to bend down and get up from a sitting position with very great ease for several hours, even after the early applications.

Henrietta-street, W.

MY INHALATION CHAMBER.

BY ARTHUR HILL HASSALL, M.D.LOND.,

LATE SENIOR PHYSICIAN TO THE ROYAL FREE HOSPITAL, FOUNDER OF AND CONSULTING PHYSICIAN TO THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST ON THE SEPARATE SYSTEM.

I COMMUNICATED to the British Medical Association, at its recent meeting in Liverpool, a paper on the Principles of the Construction of Inhalation Chambers, and I stated that, with a view to carry out those principles, I was about to construct an inhalation chamber at San Remo. This chamber is now completed and in operation, and some details respecting it will doubtless be read with interest by many of my professional brethren. The chamber has a cubic capacity of 1170 feet; it has only one door and one window, but no fireplace or chimney. The walls are washable and the floor tiled. It is warmed when necessary by admission through a grating in the centre of the floor of a little hot air from a calorifère placed in the basement of the house, the temperature of the chamber itself being raised usually to about 64° F. The chief apparatus contained in the chamber consist of two of my chamber inhalers, Nos. 1 and 2. These inhalers, it will be remembered, were in part described in THE LANCET of Oct. 6th last. The chamber inhaler No. 1 consists of a very convenient and portable arrangement of a cotton fabric disposed in layers. Each of the five cloths or layers of the apparatus employed by me has a superficies on one side of 2500, and on both sides, of course, of 5000 inches. It is suspended from the ceiling some feet above the grating in the floor, through which the warmed air enters, and it can be raised or lowered at will. The quantity of carbolic acid used to charge the whole of this apparatus is 2000 grains; but it is better to charge part of it only, and to begin with 800 grains for the first day or two, raising the amount to 1000 or 1200 grains in the course of a few days. The latter quantity is that which I have hitherto chiefly employed, and so far no inconvenience has been experienced. The time of inhalation has varied from one to two hours daily, but it is best at first to be content with half an hour only. I find that there are several circumstances which affect the rate of evaporation of carbolic acid, and of other more or less volatile substances, in addition to those to which I have elsewhere adverted—namely, complete solution and dispersion over a great extent of surface. The chief of these additional circumstances is the state of the air, as to moisture, motion, and temperature; the drier the air the more rapid its movement, and the higher the temperature the more rapid the volatilisation. On the other hand, the reverse conditions of moist, still air, and comparatively low temperature, greatly retard volatilisation.

The following experiments may be cited in illustration of the above statements:—One hundred grains of carbolic acid dissolved in 100 c.c. of water = 1540 grains, were distributed over a piece of cotton fabric having a superficies on one side

of 153 inches. This was exposed at a temperature of 58° F. for ten hours of the night in my inhalation chamber; at the end of which time 58·2 grains of the acid were recovered. A portion of the same fabric, of the same dimensions and similarly charged, was exposed to the rays of the sun at a temperature of 90°, there being a light breeze blowing at the time. At the end of four hours 4·74 grains only were recovered—that is to say, nearly the whole of the acid had disappeared. From a third portion of the fabric charged in the same manner and exposed in the chamber during the day for six hours at a temperature of 60° F. there were recovered 54·2 grains, so that nearly one-half of the acid had disappeared. The above experiments clearly show that the still sunless air of a chamber having a temperature of only 60° F. is far less favourable to evaporation than free exposure to an actively moving and warmer air. Still, the rate of evaporation, even under such circumstances, is amply sufficient for all practical purposes. When the temperature of my inhalation chamber is raised to 64° F., the results, as will now be shown, are still more favourable. In an experiment in my chamber, the temperature of which was maintained at about 64° F., using 1200 grains of carbolic acid, there were recovered at the end of six hours 500 grains, showing a loss of no less than 700 grains. This result is very satisfactory. From the foregoing experiments it is also apparent that in order to arrive at fixed results, it is necessary that the chamber should be worked as nearly as possible under the same conditions, especially of temperature. But there is still another important circumstance which has to be taken into consideration—namely, the composition and quality of the fabric over which the medicaments employed are dispersed. I find that a cotton fabric answers the purpose much better than one of linen, and also that, whatever the composition, it should not be too thick and rigid, as in this case it retains the moisture for too long a period, the vaporisation being thereby much retarded. The following experiments show this in a striking manner. From a light cotton fabic with a superficies on one side of 153 inches, and weighing 483 grains, there were recovered at the end of six hours' exposure in the chamber, at a temperature of 60° F., 54·2 per cent. of the acid. From a thick coarse brown flax fabric with a superficies of 157 inches and weighing 1027 grains there were recovered under the like circumstances no less than 77 per cent. Lastly, from a thick close cotton fabric with a surface of 153 inches, having a weight when dry of 662 grains, 77 per cent. of the acid were likewise recovered. These experiments are also very instructive. I may here mention that my first experiments on evaporation by means of cloths—namely, those recorded in THE LANCET of Oct. 6th—were, I have since ascertained, made with a somewhat dense flax material, and hence they were not the most favourable to evaporation; yet the results arrived at were very striking.

It has been stated that my inhalation chamber has a capacity of 1170 cubic feet. A cubic foot contains 1728 inches; a man 5 ft. 7 in. in height has a respiratory capacity of 222 inches = nearly eight inspirations per foot, or 9368 per 1170 feet. Taking normal respiration at eighteen per minute, the consumption of air would be 3888 inches per minute and 233,280 inches per hour = 134 cubic feet.

Now, supposing the apparatus be charged with 1200 grains of carbolic acid, about 600 grains, or one-half, would at a temperatue of 64° F. be vaporised at the end of six hours, this being at the rate of 100 grains per hour. Supposing, further, that the cloths have been charged for one hour before the patient enters the chamber, and that he remains there for one hour, the quantity of carbolic acid which would be vaporised in the two hours would be 200 grains, and if the patient remained in the chamber for the two hours, the amount would be raised to 300 grains. The quantity of acid therefore which would be contained in the 134 cubic feet of air at the end of the first hour of inhalation, supposing none of it were inhaled, would be 22·9 grains, and at the end of the second hour 34·3 grains. But it must not be supposed that the whole of the above quantities would actually be inhaled by any patient who occupied the inhalation chamber for the periods above named; the quantities would in reality be much less, owing to several causes. First, the capacity of but few *poitrinaires* is as great as 222 cubic inches; second, a loss of material is constantly going on to some extent by escape through the crevices around the window and the door; and then, thirdly, there is a sensible deposition of carbolic acid on the walls of the chamber itself; so, formidable as is the amount of carbolic acid originally taken, the quantity actually inhaled is surprisingly diminished. Still, great caution and watchfulness should be observed, lest in any case the chamber should become overcharged; but this so far has never once happened.

The loss of about 100 grains per hour during the first six hours of its use at a temperature of 64° F. is readily effected by means of my No. 1 chamber inhaler, 11 by 16 inches. It is preferable, however, to employ an inhaler double or treble the size, as in this case it will not be necessary to charge the whole of the cloths at one time. Should a larger elimination of the acid be desired, in consequence of the greater size of the chamber, it is only necessary that a proportionately larger apparatus should be employed. Amongst the advantages of an inhalation chamber is the avoidance of fatigue, often a consideration of great moment. Many patients are unable from weakness to make an efficient use of oro-nasal or oral inhalers. Again, it is not necessary that all patients should resort to a specially prepared chamber, since, under proper medical advice, the method of inhalation with either of my chamber inhalers, No. 1 or No. 2, may be carried out, though less perfectly, in the patient's own room.

Being desirous that my methods of inhalation should be put to the test of wide experience, I have determined not to confine my inhalation room to my own patients, and have accordingly thrown it open to the medical men of all nationalities in San Remo, so that any of their patients may make use of it under the observation and guidance of their own medical attendant. Whatever may ultimately prove to be the value of inhalation in diseases of the organs of respiration, there can be no doubt that this method of treatment, as it may now for the first time be carried out by new and effective means and appliances, ought to receive a fair and full trial, as also that it must prove of service, at least in some of the diseases of those organs. Every hospital and institution, therefore, for the treatment of diseases of the organs of respiration should be provided with one or more true inhalation rooms, and I shall be happy to advise any who may desire it as to their construction, and when in England in the summer to afford any help in my power in carrying out the necessary arrangements. But it is not only in lung diseases that such chambers are required; with some modifications they would doubtless prove of great service when used as disinfection chambers. With this view, there are but few institutions for the treatment of the sick which should be without so powerful a means of combating certain diseases, and especially those of an infectious nature.

Although I have referred in this article chiefly to carbolic acid, yet it must be understood that a variety of disinfectants, stimulants, antispasmodics, and sedatives, are also to be used in suitable cases in inhalation chambers. In carrying out a system of inhalation, I do not think it well to rely exclusively on chamber inhalation; but this should be supplemented by the employment of really efficient oro-nasal or oral inhalers, and in some cases disinfectant and other appropriate remedies should also be administered by the mouth.

San Remo.

ON A CASE OF ACTINOMYCOSIS.

BY W. KNIGHT TREVES, F.R.C.S.,
SURGEON TO THE NATIONAL HOSPITAL FOR SCROFULA.

P. C——, aged forty-five, a brick burner, was admitted on August 17th, 1883, into the Royal Sea-bathing Infirmary under my care, supposed to be suffering from a scrofulous affection of the glands of the neck. He is a powerfully built, muscular man, with a good family history. His illness began sixteen months before admission with inflammation about the neck and angle of the jaw, which, however, only kept him from work some two or three days. He has lived well and been in a comfortable position for his class in life. He has never had cattle to look after. A lump by the angle of the jaw followed the inflammation, which was incised. Subsequently other swellings formed. When first seen he was in fair general health and well nourished. Over the angle of the jaw and in the posterior triangle of the neck were three ulcerated and fungating surfaces, those by the angle of the jaw being about one inch, and that in the posterior triangle about two inches in diameter. There were tumours over the collar bone, the second rib, and the fourth

costal cartilage near the sternum, each of which was in a direct line, and had followed in regular order the one described as existing in the posterior triangle. These tumours resemble each other in appearance; they are smooth and evenly formed and are in shape as nearly as possible half a sphere; the upper one is two inches in diameter, the lower one an inch, and the middle one intermediate in size; they have an elastic, semi-fluctuating feel; the skin over the upper one is thin, red, and evidently about to give way; the skin of the middle one is also discoloured, that of the lowest is normal. To the right and left of these tumours are two nodules about the size of a marble, apparently the same thing in process of formation. The discharge was thin and serous and contained minute yellowish masses, and disintegrated tissue, and had a peculiarly offensive and

sour smell. The patient declined operative interference. He remained in the hospital till Dec. 7th, the progress of the case being gradual loss of flesh, formation of lumps on the other side of the neck and in the axilla. The three tumours described became broken down, and he presented before his discharge the appearance given in the woodcut, which is from a photograph. The appearance of these tumours resembled nothing that I had ever seen before. The case was certainly not scrofulous; nor was it like any new growth with which I was familiar. I arrived at the conclusion that it was an example of the disease known as actinomycosis. This diagnosis was confirmed by the discovery under the microscope of bodies which I believed to resemble the fungus described as peculiar to this disease. So far as I can ascertain, this is the first case of actinomycosis described in this country.

Margate.

ON SOME PROBABLE CAUSES OF INFLAMMATION OF THE BRAIN IN CHILDREN.

BY JOHN WARD, M.D., M.R.C.S.

A MODERN medical author has stated,[1] "that the causes of inflammation of the brain are often difficult to detect, and that symptoms of the acute form of the disease sometimes arise without any appreciable cause"; and I think there are few who will not assent to the statement that, apart from those forms of the disorder which arise in the course of some specific fever, or those of a tubercular nature, cases not unfrequently occur which have seemed as unaccountable in origin as unsatisfactory in treatment. Where meningitis is accompanied by cachexia and is associated with tubercle, we endeavour to correct the tendency, whether constitutional or acquired, and aim at removing causes—defects of ventilation and the like—which may have lowered the vital tone. Niemeyer, whilst noticing the frequency of tuberculosis of the meninges during childhood, speaks of its rarity in infants during the first year of life—although all must have noticed the frequency of fatal convulsions at that tender age,—and asserts that premature or excessive mental exertion is blamed unjustly as exciting hydrocephalus, and so likewise blows or falls on the head where there is no tubercular predisposition. So often unsatisfactory are our efforts in the treatment of the grave symptoms which usher in the disease, that if we can arrive at a more intelligent appreciation of causes which have in some instances appeared to be associated with its development, we shall be nearer the attainment of that knowledge which will enable us to guard against its approach, if not to combat it successfully when developed. The opportunities for the exercise of disinterestedness and self-denial, since sanitary questions presented their claim to the consideration which their importance demands, are not less wanting than when the perils of contagion beset the medical attendant on every hand; and although principle may ofttimes be put to severe test, yet the erudite, impartial, and observant inquirer will be prepared to draw correct inferences from the statement of simple facts, which all may interpret, although at first sight there may appear a disposition to hasty generalisations which are opposed to scientific progress. Granting that, as in some other departments of science, observation and inference are closely allied, and proceed together, so in the investigation of so difficult a subject as the etiology of disease we may be allowed, bringing scattered facts together, to draw conclusions which, from repeated confirmation, may become established, or by refutation overturned. That morbid states of the brain may be due to a poisoned state of the blood the frequency with which brain symptoms manifest themselves in the progress of zymotic diseases attest; and we may, I think, reasonably infer that associated insanitary conditions, which so powerfully predispose the human system to the development of the class of diseases named, may be alike provocative of the other class now under consideration. Nor should we suppose that the delicate vaso-motor nervous system, whether apprized of depressing morbific influences, present in the atmosphere, through the digestive organs, the lungs, or more immediately by its own functional activity being affected, would be slow to convey, through the blood, or more directly, to the great cerebro-spinal nervous system, with which it is so closely associated, a sympathetic influence. A period of time devoted to the interests of official sanitary work has afforded ample opportunities for observation which appear to confirm the views herein advanced as to the association of insanitary influences with the development of brain symptoms, for the most part, in children.

I regret that I have not now at hand more than a moiety of the numerous instances which I carefully noted, as worthy of reporting to the sanitary authorities, in whose service I was employed, for their action, and must be content to adduce some of the instances which appear to me to have a decided bearing on the question under consideration, occurring, with one exception, during the last year of my tenure of office, craving, at the same time, the attention of the reader to the dry detail. The deaths are specified as supplied to me by the registrars of the districts, and the sanitary defects are the result of my own observation, and selected, I may add, from a numerous class which careful observation had led me to conclude as attesting the necessity for sanitary inspection.

C. M. G——, aged six months; meningitis; cottage under one continuous roof with an old stable, in which a pig was kept. J. W. G——, aged twenty-one months; convulsions, three hours; cottage immediately joins a stable, chimney flue of bedroom papered over; child brought here at Easter, six months ago. Did not ascertain whether the horse was brought in from its summer's run about the time of the child's death; on the setting in of colder weather there would be a greater determination of the air of the interior of the adjacent buildings, as of the foul stable, towards the warmer house atmosphere. J. Y——, aged twenty-one months; cerebral meningitis, six days, succeeding scarlet fever; small cottage without back door, one of the bedroom windows has no means of being opened, large accumulation of farmyard manure within a few yards of the dwelling. H. J——, aged nine years; meningitis, pneumonia; house damp from excavation of site, the soil re-

[1] Pract. Med. (Tanner), revised by Broadbent, 7th edit., vol. i., p. 357.

maining adjacent to two of the sides for a considerable height; old pig-stye in immediate proximity used as a place for ducks at the time of my visit; bedrooms badly ventilated; the child had resided here about three months. D. J——, aged three years; meningitis basilaris; the boy occupied a close bedroom, which formed a cul-de-sac; pig-stye attached to the gable end of the building within a few yards of where he slept. G. B——, aged eleven weeks; convulsions, seven days; the cottage, the bedroom of which had no fireplace, was close to an old stable, and in proximity to another stable which adjoined the intermediate building. H. F. K——, aged five months; acute meningitis; bedroom close, has no fireplace; the house adjoins a barn used at the time of my visit as a pig-stye and hen-roost. B. B——, five years; meningitis, three weeks; bed placed in close corner of small room, situated immediately over a hot kitchen. S. A——, aged three years; cerebral meningitis; back to back cottages; bedroom forms a cul-de-sac. R. H——, aged six years, disease of brain; cottage of the same character as the preceding. T. C——, aged four months, meningitis, emesis; cottage let in three tenements; bedroom badly ventilated; hen-roost adjoins the dwelling. A. T. F——, fifteen months, measles, convulsions; house small, with cellar-kitchen, where offensive slop-stone arrangement exists, the waste-pipe from which communicates immediately, save water-trap, with the sewer; watercloset, with unventilated soil-pipe, situated in the centre of the house; very offensive odour frequently perceived through the house; adjacent street sewer has imperfect flush, and is connected with main having a tidal outlet which is obstructed when the tide is at flow. A. B——, dressmaker, aged eighteen years, tubercular cerebro-spinal meningitis; cottage situated on ground excavated at the side and placed against the damp soil; five individuals slept in one small bedroom; watercloset, with unventilated soil-pipe, adjoins the back kitchen. C. F. S——, aged six years, inflammation of brain; drain from watercloset obstructed. E. S——, aged four months, cerebral meningitis; child slept with parents in close corner of bedroom, the chimney-flue of which was stopped up. W. T——, glassblower, aged twenty-three years, tubercular meningitis; occupied small close bedroom, which had no fireplace. H. L——, aged two and a half years, convulsions; slept in a small bedroom which had no fireplace, with others; a number of cage-birds kept in the cottage. E. T——, aged nineteen months, meningitis; child slept with parents in a badly ventilated bedroom, which formed a cul-de-sac; a number of cage-birds kept. — L——, an infant, previously healthy and the offspring of healthy parents, was seized with convulsions, the cause of which seemed at first unaccountable. On investigating the sanitary arrangements of the house, the end cottage of a row in an open situation in the country, it was discovered that, in consequence of an offensive odour, the slop-stone waste-pipe, which communicated direct with the sewer, save the intervention of water-trap, had been some time ago plugged up at its inlet. On the suggestion being made, with considerable earnestness, to the anxious father of the child, to expose the sewer connexion outside the foundation of the house, and disconnect by removing a length of pipe, the work was at once effected, to the conviction of the until now incredulous father, who had in the process become almost overpowered and rendered ill by the offensive odour emitted on opening the branch of the sewer laid on to the house he occupied.

The frequent occurrence of illness in children occupying other houses in the row, where the sewer connexions were laid close to the foundation walls, or communicated, with intervening trap, direct with the sewer, had previously directed attention to the main, which coursed down the centre of the small open areas at the back of the cottages, which were enclosed by a high wall, and which was imperfectly flushed and without proper ventilation, but the action of the sanitary officials, in conjunction with that of the agent of the property, resulted rather in closing one of the adjacent pumps than in being directed to the sewer or the connexions of the houses therewith, or in causing the foul ashpits and privies, emptied at the caprice of the neighbouring farmer, once a year or otherwise, to be duly and repeatedly cleansed.

To return to the infant in the end cottage, which had been attacked with convulsions; as soon as the slop stone waste pipe was thoroughly severed from the sewer, and the foundation of the house purified from sewer emanations, the symptoms immediately began to abate, and were speedily followed by the recovery of the child. To my mind the causative association of impure, and especially filth contaminated, air with many diseases of the brain, as well as of other organs hitherto not recognised as bearing any such relation by medical writers, has received abundant evidence from a careful investigation of the sanitary surroundings of a large number of cases which have come under my notice; and the opportunities afforded me have driven home the conviction that not merely more chronic diseases of the brain and nervous system, whether functional or organic, but that other diseases, the causes of which are now usually attributed to other influences, will sooner or later have this element as one of their recognised etiological factors.

Sutton Coldfield.

THE AFTER-TREATMENT OF TRACHEOTOMISED PATIENTS.

BY T. ASTLEY GRESSWELL, M.B., M.R.C.S.,
HOUSE-PHYSICIAN, ST. BARTHOLOMEW'S HOSPITAL.

THE operation of tracheotomy is performed in order to allow free access of air into the pulmonary cavities on ocasions when dyspnœa either is anticipated or actually exists as a result of some obstruction of the supra-tracheal respiratory passages; but when danger to life from such obstruction no longer exists, it becomes our endeavour, nay, in very many cases, our duty, to do what we can to restore the natural air-channel; and our duty in this respect is the more binding when we are dealing with babes and children. There are, however, many difficulties in our way, and they are most numerous and most marked in just those cases in which success is most essential, in babes and children. The methods commonly adopted, and those recently advocated by Dr. Steavenson in the St. Bartholomew's Hospital, Reports for 1882, are very frequently successful; but they are not always so, and the result is that we frequently meet with children who have worn tracheotomy tubes for years, and are still wearing them. Examination of such children seems to tell the tale that the difficulty is an inability to open the glottis. They quickly become orthopnœic if the entrance to the tracheotomy tube be closed. Why? Cases have been carefully examined, and no obstructing nor compressing mass has been found at the glottis (a probe, and, indeed, a rod of larger diameter passing freely upwards and downwards through the glottis), or in the nose, the mouth, the pharynx, or the larynx; and yet, despite these facts, the child does not breathe when the entrance to the tracheotomy tube is closed; nay, more, we may remove the tracheotomy tube, and the child may breathe even for hours, but only through the artificial tracheal opening, for as the latter closes dyspnœa sets in and the child dies if not relieved. Towards the interpretation of these phenomena two suggestions offer themselves—viz., either (1) the glottis cannot be opened by the child, so that when the tracheal opening is closed inspiration is impossible; or, (2) the glottis is opened, but the trachea, weakened at the site of the operation, collapses during inspiration to such an extent as to occlude the passage. The latter does certainly in many cases that I have witnessed constitute one factor in the difficulty; it is not, however, the sole factor, for orthopnœa results if we merely close the entrance to the tracheotomy tube, and this though the tube have an ample and fully patent "laryngeal opening." Hence the conclusion that the difficulty lies chiefly in the inability of the child to open the glottis. Such conclusion is also borne out by the papers of Drs. Lauder Brunton and Cash on the Valvular Action of the Larynx, and by Dr. John Reid's observations in his "Physiological, Pathological, and Anatomical Researches." Now, we know that the laryngeal apparatus is actively synchronously with the thoracic and the facial apparatus during inspiration, while elastic recoil is the sole phenomenon presented by the apparatus during expiration; in other words, nervo-muscular energy is expended in the laryngeal as in the thoracic and facial apparatus during inspiration, while expiration is attended by mere recoil of the structures, whose position has been changed on the expenditure of nervo-muscular energy. And herein consists, I think, the difficulty; the child has been breathing very easily through the artificial tracheal opening for so long a time that the laryngeal inspiratory apparatus has lost its cunning.

How has it lost its cunning? Have the nerve-centres, the nerves, the muscles, or the joints of this apparatus become disabled? We are inclined to think that each and all of these structures have become in some degree affected; that disease has played the part it ever plays, and has resulted in loss of response and of coördination of nervous and of muscular structures and in stiffness of joints. It was this view that led me to ask of Messrs. Arnold and Son to make the instrument here represented, an instrument devised with the object of bringing into play the powerful influence of use—i.e., with the object of teaching the laryngeal nervo-muscular mechanism to retake to its proper duties, and this by constantly maintaining a certain amount of dyspnœa.

We may call A the cap and B the projecting portion, the added portion of the tracheotomy tube. B is perforated with slits and holes. A can be screwed down over B so that with every advance of the cap a portion of the windows of B is obliterated. The object will be readily understood. When the obstruction to supra-tracheal respiration no longer exists the cap is applied as early as possible; the patient breathes then with some difficulty, and for some days can bear no more than a very small obliteration of the holes. The patient has just some difficulty in breathing, and attempts every now and then to open the glottis and occasionally to call out crying. At times through the day the cap is screwed down so as to cause severe dyspnœa for a while, and the patient makes corresponding efforts to open the glottis. Improvement is first noted when the patient calls out crying, at first feebly but soon lustily, and then begins to call out, "Nurse," "Yes," "No," and this, though the child may never have spoken prior to the operation of racheotomy.

This apparatus was applied in the following case. M. C——, aged nineteen months, was admitted to St. Bartholomew's Hospital, June 15th, 1882, and she was tracheotomised almost immediately for orthopnœa. The child progressed well; the largely swollen tonsils and sub-maxillary lymphatic glands became of almost natural size in about four weeks, and though no discoverable obstruction remained, the child could not breathe when the opening of the tracheotomy tube (furnished with a large laryngeal opening) was closed, nor could it breathe for more than a few minutes when the tracheotomy tube was removed, in which case it breathed only as long as the tracheal opening remained patent. The child, moreover, made no progress in this particular; and, two weeks later, the above described tube was used, the openings were gradually obliterated by screwing down the cap; and about two weeks later it began to inspire through the glottis. About two weeks later the child was able to breathe throughout the day with the cap screwed fully home; but it could not sleep with the holes thus obliterated until another week had passed, and then it wore the tube continuously for a whole week by night and day. The tube was then removed and was not again required; and the child was discharged on Sept. 11th, 1883. She has not suffered since from cough or dyspnœa; and at the present time she is strong and robust.

Again, C. E——, aged eighteen months, was admitted to St. Bartholomew's Hospital, Aug. 13th, 1882, for diphtheria, at the time suffering from intense dyspnœa, for which he was tracheotomised. He recovered in every way, but I could not induce him to breathe through the larynx. About the middle of January, 1883, he had no further advanced; he almost immediately became cyanosed when I placed a finger lightly over the opening of the tracheotomy tube, and he could breathe after removal of the tube only as long as the tracheal opening remained patent. The above described tube was used, and after a few weeks he was able to cry lustily, and to say "Nurse," "Yes," "No." When the opening of the tracheotomy tube was wholly closed, he could pass the day comfortably with the tube wholly closed, and could sleep at night with the tube almost closed.

The question remains as to how the tube acted in the above cases. The object was so to screw down the cap as to maintain an ever-increasing degree of deoxygenation of the blood, and by this means to educate the laryngeal nervo-muscular apparatus to open the glottis for inspiration. This may be the *rationale* of these cases, but whether so or no, the probability remains that the instrument was directly concerned in the cure of the first case and in the great improvement of the second.

Thus far I have tacitly assumed that the difficulty is owing chiefly to loss of nervo-muscular energy or coördination, or to both. But should stiffness of the joints of the larynx enter into our computation? I am inclined to think that it should, for manipulation of the larynx certainly seems to aid us in the cure of these cases, as it serves in the cure of stiff joints generally. Dr. Lauder Brunton, however, kindly suggests that such effects may be due to the influence of "massage." Would diphtheritic paralysis of the larynx contra-indicate the use of such a tube? Diphtheritic paralysis apparently does in some cases affect the nervous or the muscular portion of the laryngeal inspiratory mechanism, for we frequently see fluids pass down the trachea during drinking in diphtheritic patients who have been tracheotomised; indeed, we have heard of death being due to asphyxia therefrom resulting. I feel that the tube is also applicable to these cases, but that we should exercise great caution during its use in order not to obliterate the holes too quickly. Electricity would also seem to be indicated in these cases. With regard to the working of the apparatus here described, I may say generally that it is easy, careful and constant attention being, however, a *sine quâ non* for success.

SCARLET FEVER.

A REMARKABLE SERIES OF CASES, AND A NOTEWORTHY END OF IT.

BY E. DIVER, M.D., M.R.C.S.

ON Nov. 21st, 1880, my attention as medical attendant to a school of about 250 children was called to a girl with a rash, which I found to be that of scarlet fever. No information was forthcoming as to whence she got the disease. She was removed to the infirmary—a building in all ways isolated from the school; the room in which she had been temporarily placed was scoured and cleansed, and a good look out amongst the children was kept up. In ten days another girl had scarlatina, and she was removed to the companionship of the former. Three weeks passed with no fresh case, but on the twenty-fifth day another girl had to be taken to the infirmary. We were free again until the twentieth day, when another girl showed signs of scarlatina, and was removed like the three others. In seventeen days more, three cases occurred together, all girls; in fifteen days from these, another girl; in twenty-eight days more, two girls; in ten days after these, another two; and in twenty three days more came the thirteenth girl, and the last of the series. After the tenth girl got ill, the disease showed itself in one of the boys, and I wondered whether we were now to have a regular epidemic. But time proved that this boy was the only one to be ill, and he turned out to be the brother of the sixth girl. It was proved, too, that his mother had seen and kissed him after having gained an interview with her convalescent daughter forty-two days after this girl's illness began. Ten days after the mother's visit the boy complained of a sore-throat. After each removal of a patient or patients to the infirmary, the interval was anxiously watched, and once or twice we began to think we had done with the disease. But on being disappointed we were puzzled to account for its recurrence. There was no probability of infection from the old cases, and we knew of no scarlatina elsewhere in the neighbourhood. The limited spread of the disease was against its being brought into the school with any sort of food, and all the water was pumped from a deep well. The drainage was almost entirely by earth closets, and there was no overcrowding, the dormitories being ample and well ventilated. At length I examined the water cisterns. These were situated in the roof of the building, and I traced each pipe going from them. One I found went to a dormitory, and terminated in a tap from which the girls on going to bed could draw water; and I ascertained that all the sick girls had drunk from this

source; probably many others had done so, too. The overflow pipe from the same cistern had its orifice of discharge over a gully in the corner of a paved yard, the orifice being parallel with the gully, and an inch or two above it. Side by side with this pipe, and terminating at the same level, was another. This other led down from a slop sink, and conveyed the night urine from the girls' dormitory into the drain. These pipes had been in use for two years, as had the portion of the school wherein the disease occurred and to which they belonged. The drain, which was trapped below the gully by a Doulton's siphon, conveyed also rain water and bath-room water to the larger drain beyond, and the gully grating was somewhat furred with urine salts. Now, whether the structural arrangement described had anything to do with the scarlatina or not, it was clearly a bad one, and open to grave suspicion. The overflow pipe was therefore cut away to half its length on March 26th, 1881, nine days from the last case of illness, and was made to discharge itself upon a low roof hard by, thus dissociating it from the urine-pipe, which in its turn had its extremity cut into the shape of a jug spout. After this no case of fever happened.

Owing to the circumstance that no ordinary cause of the disease was discovered, as contagion or fomites, it seems probable that there was some less common cause for this series of cases of scarlatina. If so, either it was one of which I am not cognisant, or it was connected with the juxtaposition of the two pipes. In the latter case, the overflow pipe appears to have conveyed to the cistern, upon Tobin's principle of ventilation, air, with all that air may carry, and the chemical results of some decomposition of urine and perhaps of other fluids; and by this contamination the water was made equal to the production of scarlatina at uncertain intervals, depending partly upon the receptivity of those who drank of it. Arguing upon this, one's question next is, What is this chemical which was conveyed from the urine pipe, or perhaps, but unlikely, from the comparatively harmless drain below? For, so far as can be told, no ordinary scarlatina germs were present, the facts appearing to favour the theory that scarlet fever may be generated *de novo*.

As to the case of the boy, he had no means of getting at the water which the girls drank from, and I know of no way in which it was probable he took scarlatina, except it be admitted that his mother brought it to him. But if she did, the period of apparent incubation was of unusual length. It may be, however, that the poison lay in his clothing for a day or two, and so the ordinary period of incubation may not have been transgressed. But if the boy's mother did not bring the disease to him, and the girls did not get it by means of the pipes, then the facts given exemplify what is undoubtedly true sometimes, that with all the circumstances seeming to favour a given conclusion that conclusion is not correct, because an important something else has needed recognition. Query, In the present case, is there this something else?" And if there is, what is it? But if not, what was the seed of mischief in the water?

Kenley, Surrey.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem estalia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

TWO CASES OF TRAUMATIC ONE-SIDED PALSY OF SPINAL ORIGIN.

(Under the care of Mr. HULKE.)

CASES of this kind seem to be rare. In the first case the lower, in the second the upper limb was affected. In both the motor palsy was of much greater intensity and of longer duration than the loss of sensation, a coincidence which may find its partial explanation in the greater complexity of motor function. The implication of both motor and sensory functions would suggest a lesion of the nerve cords beyond the junction of their motor and sensory roots, and would locate in the second case the injury outside the intervertebral foramina. The widespread convulsions, however, in this case point to a more centrally seated injury, to an excessive strain falling principally on the anterior roots and their ganglionic connexions, and to a widely spreading irritation. In the first case the lesion was considered to be probably hæmorrhage into the anterior grey cornu.

CASE 1. *Palsy of Left Lower Limb from a fall.*—On March 16th, 1882, at 11.30 A.M., a short, extremely stout carman, aged twenty-eight years, was received into Broderipp ward for injuries received a few minutes previously in a fall from his driving-box, in which, it was said, his loins had struck upon the pole or splinter-bar of the van. When extricated from between the horses it was found that he was unable to stand in consequence of want of power in his left leg. Upon examination half an hour after the accident there were noted absolute motor palsy of the left leg and thigh, great insensibility to tactile stimulation as high as the knee, and absolute insensibility of the surface of the scrotum, and integument of the penis, on both sides of these latter parts. No reflex movements could be excited in the limb. Retention, requiring the use of the catheter, was also shortly afterwards observed. On the following day the anæsthesia of the scrotum and penis had disappeared, and that of the leg was much less. Defecation occurred without consciousness of the act. Notwithstanding precautions to avoid septic infection of the bladder by the catheter, acute cystitis supervened on the third day after the injury. Urine, alkaline and bloody, was voided occasionally without consciousness of the occurrence, but when the catheter was used, as the emptied bladder contracted upon it he suffered very great pain. This was so severe—he called it agonising—that a hypodermic injection of morphia was required daily during several weeks. Later, retention was replaced by stillicidium, which was not the dribbling of an overfilled viscus, but it was due to loss of tone of the sphincter vesicæ; for catheterisation proved that the urine escaped per penem as quickly as it entered the bladder through the ureters. On May 15th, a few months after the accident, he had a severe gastric attack, marked by severe pain in the region of the stomach and vomiting. This yielded to bismuth and prussic acid. Two days afterwards acute inflammation of the left testis supervened. The left lower limb by this date had become very œdematous, the surface was pale, the epidermis thickened and opaque. His state varied little from day to day, but in the course of June and July a marked improvement had taken place. By the end of the latter month he was able to flex and extend the hip, knee, and ankle-joint through a considerable angle, and he had regained some power over the toes. The improvement was more rapid after he was able to be dressed and wheeled about in a chair, and it was yet greater when, with the aid of crutches and supported by a couple of assistants, he began to try to walk. When last seen, about a month ago, he walked with crutches only, and did not need any longer the assistance of others, and the improvement of the limb was so considerable as to warrant hopes of the recovery of a useful limb. The paralysis of the sphincter vesicæ and unconscious defecation continued. The treatment consisted mainly in measures tending to maintain and improve the nutrition of the palsied limb—e.g., shampooing and faradisation. Much care was required to avoid the formation of pressure sores.

CASE 2. *Violent general Convulsions and Motor Palsy of the Left Upper Limb, caused by a severe Squeeze of the Neck; Recovery.* (From notes by the dresser, Mr. C. E. Faunce.)—On March 10th, 1881, a factory boy, aged sixteen, while in the act of stooping over a rail and looking down the well of a lift, was caught across the neck by the cage in its descent, and thus held imprisoned until the jambed-tight cage was lifted with a crowbar sufficiently to allow the extrication of his head. Insensible and violently convulsed, he was immediately brought in a cab to the hospital. On undressing him it was found that he had voided urine and fæces. The convulsions soon ceased, consciousness returned slowly, and was not completely restored until night. The left upper limb was completely paralysed as regards motion, but the sensibility of its surface was only slightly if at all impaired. The left pupil was contracted; the left cheek and the right forearm were noticed to be slightly grazed, and the right side of the neck seemed to be a little swollen.

The sternal end of the left collar bone was incompletely luxated forwards. Temperature, taken in armpit, was subnormal (97·6° F.), and it continued so during a week. On the fourth day a strong volitional effort produced slight movements of the hand and forearm. This improvement continued, and by December 5th, when he become an out-patient, he could execute with regularity such complete acts with the hand and forearm as were required in dressing and taking his meals. He soon after this returned to work, and when recently seen the only remaining traces of the injury were a slight loss of bulk and slight defect of muscular power of the limb as compared with what he believed to have been its condition previously; and the subluxation of the collar bone, which did not appear to cause any inconvenience.

EVELINA HOSPITAL.

CASE OF RUPTURE OF THE ŒSOPHAGUS; FRACTURED BASE; NECROPSY.

(Under the care of Mr. HOWSE.)

FOR the following interesting notes we are indebted to Dr. W. H. C. Newnham, resident medical officer.

Edward B——, aged three years, was admitted on Oct. 15th, 1883. On the 15th, at 10 A.M., the child went up to a baker's cart standing in the street, and hanging on the back the cart tipped up. The child fell with his head on the stones, the cart striking his forehead and chest.

On admission there was a very small cut on the back of the head, no bone exposed. There was much bruising of the left eyelids, bleeding from right nostril only. The child appeared drowsy but quite conscious. No paralysis, no convulsions, no vomiting. Pupils equal. Pulse 80, not quite regular. Temperature 96° F. Limbs not drawn up. In the night the child was very sick, bringing up a large quantity of blood.

Oct. 16th.—Pulse 156 Respiration 48. Still conscious, eyelids much more ecchymosed. At 10 P.M. the child began to have convulsive movements of both arms and legs, equal on both sides, some twitching of face also, was not drawn to either side. Temperature 103·2°.—17th: The movements have continued at intervals during the day. The right pupil is much more dilated than the left. No paralysis apparent. Pulse 192; respiration 60.—18th: At 2 A.M. the child died quietly. The treatment was simply to keep the child in bed with an ice-bag applied to the head, and administering a little milk.

Necropsy, thirteen hours and a half after death.—Well-nourished, well-developed child. Rigor mortis present; ecchymosis of both upper eyelids, chiefly left; a small superficial wound of occiput. No other external injury. Head: Meningitis, chiefly of vertex, but slightly at base of brain; lymph becoming yellow in the sulci; opacity of membranes; changes not localised on hemispheres; no bruising of brain substance, or other changes; some excess of fluid; the left spheno-frontal suture at the outer end (where the great wing of the sphenoid articulates with the horizontal plate of the frontal) is started, and a fissure extends forwards into the orbital plate of the frontal about an inch and a half; a very slight extravasation of blood at this fracture beneath the dura mater; no other fracture of skull; slight extravasation of blood into the left temporal muscle. Chest: No fracture of ribs or vertebræ, or dislocation of the latter; in left pleural cavity a considerable amount of brown gelatinous matter, chiefly, if not entirely, blood-clot, also some dark blood; in right pleural cavity some dark blood, less in quantity than in left side. Lungs normal; no rupture on pleural surface. Heart normal. Pericardium normal. Œsophagus: On left side, and somewhat posteriorly, is a rent about an inch and a half in length, half an inch above the cardiac orifice, the edges of which, though not ragged, are not sharply cut, and the edges of the mucous and external coats do not quite correspond; it is quite unlike the hole which would result from post-mortem digestion; the coats of the œsophagus in the remainder of its length are normal and healthy-looking; no other lesion discoverable. Stomach contained a little blood. Kidneys, intestines, and spleen normal. Liver healthy in appearance on the surface; and extending into the substance are some yellow patches (gummata?); no other evidence of hereditary syphilis.

SHEFFIELD PUBLIC HOSPITAL.

INTESTINAL OBSTRUCTION; DEATH; REMARKS.

(Under the care of Dr. THOMAS and Mr. THORPE.)

FOR the following notes we are indebted to Dr. Sinclair White, house-surgeon:—

Alfred H——, aged twenty-seven, a silver buffer, married, was admitted on October 25th, 1883. He gave the following history: Had inguinal hernia when a child, and wore a truss until he was four years of age. Since then the hernia has not reappeared; has been fairly healthy, and has had no difficulty in regulating the bowels. On Oct. 20th, five days prior to admission, he began to feel pain in the abdomen; the pain was of a "colicky" character. He could assign no cause for the pain, and had been until then in his usual health. On the 21st the pain was worse and the bowels were relaxed, and he vomited for the first time. On the 22nd the pain and vomiting continued, the vomited matter smelt fæcal; he had one motion. From this date until admission the pain and vomiting continued, and his medical attendant, Mr. Hargreaves, states it was distinctly stercoraceous; the bowels did not act subsequent to Oct. 22nd.

On admission the abdomen was moderately distended and tympanitic all over except in the left iliac region; here an oblong swelling could be distinctly felt; percussion over this area elicited a dull note, and pressure caused pain; elsewhere over the abdomen pressure was borne without complaint. The patient volunteered the statement, that "the water rolled all over the belly until it came to the left side, where it stopped." The inguinal canals were unduly large, but no hernia could be detected here nor in any of the situations where it may appear. Examination per rectum revealed nothing abnormal. The patient was not suffering much pain, nor were the features pinched; he complained of thirst, but the tongue was fairly clean and moist. The temperature was normal, and the pulse 96 per minute and fairly strong. He passed a considerable amount of urine, which was normal. Shortly after admission, he vomited a small quantity of liquid matter; this did not smell fæcal, and was mostly beer, which he had taken prior to admission. The case was diagnosed as one of fæcal impaction in the descending colon. Belladonna fomentations were applied to the abdomen, and an enema of castor oil and gruel was thrown up the rectum through a long rectal tube. The man was allowed small quantities of iced milk and beef-tea. The enema did not bring away any fæcal matter, but the patient seemed to improve; the vomiting ceased, and the pain subsided considerably. During the night he slept for five consecutive hours. Next morning he was was fairly comfortable; there had been no recurrence of the vomiting. The abdomen was softer, and the iliac swelling had entirely disappeared; still, no fæcal matter had come away, although the enema had been repeated. The improvement was maintained until the afternoon, when the vomiting recurred, and the pulse went up to 120 per minute; the vomited matter soon became stercoraceous, and the patient got rapidly worse.

A consultation was held, and operative interference decided on. The patient was anæsthetised, and the abdominal cavity opened by means of an incision four inches in length, at the linea alba, between the pubes and umbilicus. The large intestine was first examined, but was found everywhere empty and natural. The small intestine was next traced, and at an inch from the ileo-cæcal junction a band was found constricting the ileum; this band was easily torn through on passing the finger beneath it. The protruding portion of intestine was carefully replaced, and the wound in the abdominal wall closed by sutures. The operation was performed under strictly antiseptic precautions. The patient did not rally, and died an hour after the operation was completed. It may be here stated, that in the efforts made to revive him the subcutaneous injection of twenty minims of ether had a remarkable influence on the pulse, causing it for a short time to beat much more strongly; but the gain was not maintained for more than a few minutes. Ether was the anæsthetic used.

Examination after death showed the bowels slightly inflamed and distended with gas. The constricted portion was thickened, and its lumen narrowed but patent; there was some blood effused beneath the peritoneum around it. The large intestine contained no fæcal matter.

Remarks.—The case is one of unusual interest and shows

how impossible it is in some cases of intestinal obstruction to arrive at a correct diagnosis as to the cause of the mischief. The length of time the symptoms had existed without affecting markedly the constitution of the patient, the distended abdomen, and the presence of a considerable amount of urine, all pointed to the obstruction being low down. The presence of a tumour over the site of the descending colon and the diarrhœa (sometimes a sign of fæcal impaction) at the beginning of the attack led to the supposition that the obstruction might be due to fæcal matter; against this was the fact that pressure over the tumour caused pain and did not alter its shape. The symptoms were not sufficiently acute for volvulus, and the absence of bloody or mucoid discharge per rectum, together with the age of the patient, excluded intussusception. The disappearance of the tumour in the iliac fossa is perplexing, of its existence on admission there can be no doubt. That it was not a fæcal mass displaced upwards by the enemata is proved by the fact that the colon, after death, contained no such mass, nor had any fæcal matter escaped per rectum. That it was an inflammatory effusion seems improbable, seeing that it disappeared so rapidly. The only explanation that suggests itself is that it was caused by the last portion of the ileum just above the constriction: this would be tender to pressure owing to the spreading of the inflammation from the constricted part; it would likewise be distended with fæcal matter; still, it is difficult to imagine it could pass from the right to the left iliac fossa, especially when we bear in mind that the peritoneum would be less lax than natural, owing to the inflammation around the site of constriction. Perhaps the most remarkable point in the case is the remission of the pain and vomiting for more than twenty-four hours, and that notwithstanding the ingestion of a considerable amount of beef-tea and milk. Belladonna is known to have a soothing influence on the pneumogastric nerve, but it can hardly be credited with the remission in this case, especially as it was used externally only. That the case was one for operative interference there can be no doubt, as the patient must inevitably have died if not operated on. Had the operation been done earlier, it would probably have increased the chance of his recovery, but the peculiar train of events at first rendered it impossible to say it was a case for operation.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Mediastinal Growth.—Mollities Ossium and Rheumatic Arthritis.—Sections of Galls.—Entozoon in Lungs of Animals.—Embolic Secondary Localised Emphysema.

THE meeting of this Society was held on Tuesday last, Mr. J. Whitaker Hulke, F.R.S., President, in the chair. The discussions were well maintained throughout the evening, but were especially animated during the debate on the first two communications. Mr. Hulke said a few words on the lamented death of Mr. Wheatley, whose loss the Society deplored, and with whose family a lively sympathy was felt.

Dr. NORMAN MOORE read the notes of two examples of Mediastinal Growth. Microscopic sections were shown, with drawings, of the new growth found in the pericardium, and of secondary new growth from the lung, clavicle, and suprarenal capsule. The growth consisted of abundant large flattened nucleated cells of an endothelial type contained in well-marked alveoli. The specimens were from a man aged thirty-seven years, who was under Dr. Moore's care in St. Bartholomew's Hospital. His illness began with shortness of breath and hæmoptysis, and lasted about five months. On admission he complained of severe pain about the sternum. The breath-sounds were natural, and the heart-sounds clear. On Sept. 24th a swelling was noticed on the left clavicle; it was firm, but not very hard. On Oct. 3rd the chest gave the following signs: Absolute dulness behind from the spine of the scapula downwards; over no part of the dull region were vocal vibrations absent, and at the extreme base some sound as of air entering the lung was audible; a subcrepitant râle was to be heard just below the root of the left lung; exactly over the root of the left lung faint bronchial breathing was to be heard, but no bronchial breathing anywhere else. In front there was a peculiar hyper-resonant note just below the left clavicle and elsewhere on the left side absolute dulness. The right side was normal, and so were the heart-sounds. Three days later, dulness had increased upwards on the left side, and in the evening it was decided to perform paracentesis, and twenty-seven ounces of clear serum were drawn off with an aspirator. After this, a loud rough sound was heard over the lower part of the left back. The dyspnœa, which had been very bad, was relieved, but became very urgent again in two days, and on October 10th he died. The evening temperature had been raised throughout, and was usually above 100°, and often above 101°. On the following day a post-mortem examination was made. The pericardium was much distended, and contained blood-stained fluid. At the base of the heart, and for one-third downwards upon its surface in front, and two-thirds downwards behind, the visceral layer of the pericardium was infiltrated with a whitish firm new growth, and this extended to a somewhat less extent on the parietal surface. At the root of the left lung the new growth had invaded the main bronchus for half an inch, and actually formed its wall. The lump on the clavicle was associated with some wasting of the bone, to which and the periosteum it was firmly attached. The bronchial glands were involved. Below the diaphragm the new growth was only to be found in the suprarenal bodies, both of which were infiltrated and enlarged. A microscopic section, with drawings, of a new growth which occurred in the mediastinum of a man aged eighteen years, who died in St. Bartholomew's Hospital, under the care of Dr. Gee, was also shown. The growth was a round-celled sarcoma with a meshwork and spaces resembling those of a lymphatic gland. The patient was ill about two months. The evening temperature was for a fortnight above 100°, and for the last month, during which the pleuritic physical signs became more distinct, was above 101°. A new growth was found upon the upper and outer part of the pericardium. It pressed upon the trachea and aorta, and occupied precisely the position of the thymus gland in a child. In the last four years Dr. Moore had examined, post mortem, six other cases of new growth in the mediastinum. In all recent pleurisy was present, as it was in the two exhibited. This observation and the fact that two tumours of such different histological appearance were both associated with rise of temperature, pointed to the conclusion that rise of temperature in cases of mediastinal new growth was due to the attendant pleurisy, and not to the nature of the new growth.—Mr. H. TRENTHAM BUTLIN, the hon. secretary, thought that endotheliomata were a much more common kind of tumour than was usually supposed. It was difficult to say whether the histological units developed from connective tissue elements or from endothelial cells. In one set of cases the structure closely resembled that of epithelioma, there being nests of cells; in other cases the structure was that of hard or soft carcinoma. All varieties were extremely malignant. Dr. Moore's case belonged to the second category.—Mr. JOHN CROFT spoke of the relation of the temperature to the formation of tumours. He thought the fever might be due to the pleurisy, but the subject required elucidation.—Dr. GOODHART said that most clinical physicians considered that with tumours no rise of temperature took place, but from his experience he thought that pyrexia was not so completely absent with new growths. He mentioned a case in which he had made a post-mortem, and found some cancer in connexion with the gall-bladder; and although there was a little peritonitis, yet the pyrexia was more probably due to the process of tumour formation.—Mr. MORRANT BAKER also spoke on this question, and mentioned a case of large swelling of the femur, which was thought to be inflammatory because of the presence of fever, but was found to be otherwise.—Dr. NORMAN MOORE, in reply, made mention of an essay by Dr. Church, which showed that lympho-sarcomata of the pericardium were accompanied by a distinct rise of temperature of a more or less definite hectic type. Dr. Moore was of opinion that we could not distinguish the nature of the growth by the thermometer.—Dr. DYCE DUCKWORTH referred to some observations of his own in which pyrexial and apyrexial periods followed one another in cases of mediastinal growth. This was very paradoxical; he believed it indicated rapidly growing tumours.

Mr. ARBUTHNOT LANE showed the bones from a case of Mollities Ossium of the Skull. The occipital, temporal, and sphenoidal were alone affected, more extensively

on the left side than on the right, and the inner table more than the outer. The progressing line of softening was very apparent. It did not extend across the sutures to the adjacent bones. The softened bone showed a decalcified zone with what appeared to be the deposition of decalcified lamellæ of new bone on it. The sutures were loose, allowing of free movement. The ribs, pelvis, and scapula presented what seemed to be ununited fractures with fibrous union. These, however, proved to be due to a very rapid decalcification of the bone at the point of greatest strain, accompanied by periosteal and endosteal deposit of decalcified bone, causing the thickening observed. The articular cartilage of the left knee-joint was extensively ulcerated, and there was a good deal of bony growth on the margin of the condyles and patella. The right knee, with the elbow and shoulder-joints, presented the same appearance of ulcerative bossing, but in a less degree. The temporo-maxillary articulations presented the appearance of Charcot's disease, destruction being more extensive on the left than on the right side. He also showed the bone from a case of rheumatic arthritis, which presented symmetrical affection of the temporo-maxillary, elbow, and hip-joints. The elbows could not be extended beyond an angle of 130 degrees. The heads of the femora were enlarged, and presented in the centre of the convex articular surface a loose convex disc of bone and articular cartilage, the subjacent bone having undergone fibroid change. From these cases Mr. Lane argued that Charcot's disease was merely rheumatic arthritis affecting a patient with a feeble osseous system, and that under the influence of the irritant peculiar to rheumatic arthritis vigorous bone threw out new material, while an osseous system of feeble vitality underwent a degeneration into fibrous tissue, and that both conditions might be present in the same case. He found that the amount of eburnation and bossing in rheumatic arthritis was proportional directly to the condition of the bones affected. The bones of cases of Charcot's disease were extremely light, porous, and fragile, yet the process in them was not always solely destructive. The wasted bones of a feeble patient, as in an old ataxic, or in the temporo-maxillary articulation of this case of mollities, underwent a rapid retrocession to the fibrous condition under the stimulation of rheumatic arthritis.—Mr. CROFT said in many cases of so-called "rheumatic arthritis" the patients had never suffered from rheumatism.—Mr. HULKE thought that probably Mr. Lane, like many others, had arrived at no very positive conviction with regard to the nature of rheumatic arthritis.—Mr. EVE could not accept without reserve the notion of similarity between Charcot's disease and rheumatic arthritis. There were great differences. The amount of wearing away of the articular surface was very different in the two diseases. Other points of contrast were given.—Dr. DYCE DUCKWORTH thought that identity of appearance on the post-mortem table might be the result of different morbid processes, an accurate clinical observation of the cases was necessary to afford a proper distinction. The large effusion which occurred in Charcot's disease was a noteworthy feature of the clinical course.—Dr. GOODHART considered the autonomy of Charcot's disease must be open to question, as the cases seemed so few. He had but once lately met with this (to him) rare condition. It was difficult to exclude some cases of morbus coxæ senilis from the list of Charcot's disease.—Mr. EVE said that he spoke only of pathological characters.—Dr. HALE WHITE had seen recently three cases of Charcot's disease, in all of which enlargement of the ends of the bones was present. Féré had drawn attention to cases with no increase of the bony tissues and to others with considerable bossing. He thought we could draw no sharp line between the two groups of cases.—Dr. ORMEROD also said that no sound conclusion could be come to on anatomical grounds alone. He laid stress on the clinical characters, and referred to a paper by Pitrès and Vaillard, who had discovered peripheral neuritis in a case of Charcot's disease.—Dr. ANGEL MONEY was of opinion that peripheral neuritis would prove insufficient to diagnose between Charcot's disease and rheumatic arthritis, for he had seen hyperæsthesia and great muscular atrophy in the latter affection.—Mr. BOWLBY spoke of a painless form of whitlow as showing that the absence of pain was not alone sufficient to characterise one disease.—Mr. HULKE had had a large experience of cases of rheumatic arthritis and allied diseases. He did not know the anatomical difference between the two conditions of Charcot's disease and rheumatoid arthritis. In some cases many joints symmetrically affected, and in one case of probable rheumatic arthritis he had seen great distension of both knees.—Mr. LANE, in reply, said that in contrast with Dr. Moore he had found changes in the softened bones precisely like that described in all works on osteomalacia.

Mr. HARRISON CRIPPS exhibited many beautiful sections of galls. The class of insects hymenoptera were the chief agents at work in the production of galls. The ichneumon fly was a secondary arrival. Leaves, flowers, trunks, and roots of plants might be affected with galls. Different insects were at work in different cases. Cynips quercusfolii was the agent in the causation of the gall tumours on the under surface of the oak-leaf. Cynips rosæ formed the red bosses seen on roses. The gall on wild maple was also described. The insect first made a punctured wound. The development of epithelial and retiform structures entering into the composition of the gall was traced out.—Dr. COBBOLD referred to a monograph by Mr. Fitch on galls as the completest work extant on the subject.—Mr. SHATTOCK had studied the methods of repair in vegetal tissues. He had shown that vegetal scar tissue did not produce hair or glands. Moreover, epithelium was not capable of reproduction. In the case of the weeping ash, he had proved that involution of the leaf took place. The vegetal cell-wall formed the "reticulum," which was quite unlike animal retiform tissue.—Mr. CRIPPS, in reply, said that he used the term "parenchymatous" as identical with retiform tissue. If the overgrowth of tissue did not come from the deeper layer of cells, he could not tell whence it originated.

Dr. HENEAGE GIBBES exhibited sections of Secondary Localised Emphysema from Minute Emboli. In connexion with the investigations being made with Mr. J. B. Sutton into tuberculosis in birds, Dr. Heneage Gibbes had examined a number of animals with morbid changes in their lungs and other organs. In their first paper, read by Mr. Sutton before the Society in November last, they had shown that most of a certain class of birds had become tuberculous, and animals fed on these birds had also become tuberculous. This portion of the inquiries they were still busily working at, and they had obtained some very important facts, which they hoped to bring before the Society in a short time. The two cases brought forward by Dr. Gibbes were first that of a koodoo antelope, the fresh lungs of which appeared to be studded with tubercles. These, however, disappeared on hardening the organ. On making sections they were found to consist of small emphysematous areas, caused by minute emboli, which had blocked up the vessels and cut off the blood-supply from these areas. This had probably occurred some time before death, which was due to pneumonia. The second case was one of nematode worms in the lung of a beatrix antelope. There were nodules under the pleura not visible to the eye, but which could be felt on passing a knife over the surface. On section these were found to contain the parent nematode worm, and ova in every stage of development up to the larval form. The parent worm was not coiled up, but twisted through the lung substance. A section of the parent worm showed a number of ova in the abdominal cavity, which corresponded exactly with those found in the lungs. No intermediate forms between the larval form and the parent worm were found. He considered that at this stage it sought some other host, as he found numbers in the bronchial secretion. In January, 1882, the koodoo antelope was found to be suffering from a copious discharge from the nose and mouth. In a few days all the animals in the antelope house were similarly affected. The beatrix recovered, but about two months afterwards she was again found to be ill, and from that time gradually wasted away and died. He had not found any similar case recorded. Drawings and microscopical specimens were shown.—Dr. COBBOLD said that the destruction of animal life from parasitic lung disease was a most serious matter: a whole herd of deer had been swept off by it, and concurrent outbreaks had occurred in sheep and cattle. An account was given of the strongylus filaria (sheep), strongylus rufescens, strongylus micrurus (cattle), and another. Mr. Crisp had given a description of what he called the Gordian worm, which Dr. Cobbold was sure was strongylus rufescens. Dr. Cobbold had reared some larvæ in the earthworm, and so obtained a higher stage; these were then put in dewdrops on fern-leaves, and strongyli forms with developing sexual organs appeared. A gentleman had lost seventy out of a flock of seventy-two sheep; this was due to the seventy sheep having grazed in a particular field where in the dew on the grass multitudes of

free nematodes existed, which no doubt the animals had ingested, with the result that, eight days later, a parasitic bronchitis appeared and killed the whole number. Two of the same flock, which had not gone into the field, escaped.

CLINICAL SOCIETY OF LONDON.

Subcutaneous Nodules.—Cortical Tumour of Brain.—Creeping Eruption.—Endoscope.

THE general meeting of the Clinical Society was held on Friday, Jan. 11th, Sir Andrew Clark, Bart., President, in the chair. Three interesting papers were read. At the close of the meeting Mr. Pearce Gould demonstrated the appearances of the Urethra in Health and in acute Gonorrhœa, by means of Grünfeld's endoscope, illuminated by an incandescent electric light supplied by Mr. Hawksley.

Dr. J. KINGSTON FOWLER read notes of a case of Subcutaneous Nodules occurring in an adult not the subject of rheumatism. The patient was a man aged thirty-five, a railway porter, who came as an out-patient to the Middlesex Hospital on October 26th, 1883, complaining of loss of appetite, pain in the epigastrium after taking food, and emaciation. There was no history in the family of syphilis, gout, or rheumatism. He had been fifteen years in the 2nd Life Guards without being in hospital a day. When twenty-five he had gonorrhœa and a sore on the glans penis; the latter was probably not specific. Three years ago he first noticed a lump below the right patella; it was then small and slightly tender. This gradually increased in size, the tenderness soon disappearing. About one month later a similar swelling appeared below the left patella, and gradually increased in size. Nodules appeared beneath the elbows shortly afterwards. These remained, but no fresh ones appeared until four months ago, when he discovered a small one near the right trochanter major; it was tender—and is so still to a slight degree. This disappeared in a few weeks, but reappeared after an interval of one month, and has since grown steadily. Shortly after this second appearance a similar nodule was noticed near the left trochanter major. Similar growths have since appeared over the buttocks. On close examination as to any history of rheumatism, the only fact bearing upon it elicited was that for the last two years he has had occasional pain about the knees after working hard, and then resting; the pain would occur perhaps two or three times a week. For the last six weeks he had complained of almost complete loss of appetite, with pain after food, and constipation. He has lost a stone and a half in weight. The nodules are arranged with almost perfect symmetry, and present the following general characters:—They are subcutaneous, nearly all are separable from the skin and from the subjacent structures, and are freely movable. The skin overlying and around is normal. They occur singly, and also in large clusters, some of the large masses consisting of congeries of smaller ones. The single nodules are hard and shot-like to the touch, the larger masses are lobulated, and not so firm. They are not painful, but one near the right trochanter major is slightly tender. The distribution of these growths is as follows:—Right arm: On the posterior surface of the ulna three nodules, situated about two inches from the olecranon, one as large as an olive, the others the size of peas. Left arm: Two nodules in like position, and of about the same size. Ischial tuberosities: Beneath the skin, which in the sitting position overlies the ischial tuberosities, there are on the right side six nodules, forming a single mass the size of a Tangerine orange; a rather smaller nodule is present on the corresponding spot on the opposite side. Great trochanters: Two inches below, and a little behind the right trochanter major, there are two collections of nodules, forming a ridge about equal in size to a walnut; on the left side there are two smaller masses. Below each patella there is a nodule the size of a walnut. A small nodule is present below the internal condyle of the right femur, and another over the anterior surface of the right tibia. Reference was made to the original communication of Drs. Barlow and Warner, describing the occurrence of subcutaneous nodules similar in many respects to those found in this case, in children and adolescents the subjects of rheumatism, and also to the cases of two adults related by Dr. Stephen Mackenzie and Dr. Dyce Duckworth in the last volume of the Society's Transactions. It was pointed out that in the situation, symmetrical arrangement, free mobility, absence of pain, or infiltration of overlying integument, these growths were similar to those found in association with rheumatism, and also that the situation of the growths had probably been determined by the irritant effects of pressure. Further experience may prove that they occur under a variety of conditions which have hitherto been overlooked.—Dr. DYCE DUCKWORTH said the case closely resembled the one brought forward by himself. Before the publication of Dr. Barlow's paper he had noticed these rheumatic nodules, but since then he had more closely observed them. He thought there were several varieties of these nodules. Some are not attached to skin or periosteum; others are. The tumours are very much larger in some cases, and these are very hard, feeling cartilaginous, and never disappear, while those seen in children are smaller, softer, and disappear in six months. In the larger harder tumours the rheumatic history is vague and heart disease is absent.—Dr. BARLOW did not think the tumours were necessarily rheumatic; occasionally gouty nodules were closely similar, only they contained urate of soda. Since the publication of his paper he had seen a man about twenty-five who had had subacute rheumatism, and presented these nodules; no cardiac murmur; no fever. He gave him salicylate of soda, but the nodules gradually increased, and there appeared a definite cardiac murmur, which has persisted, but then the nodules gradually disappeared. He had found the nodules to disappear under repeated blisters; he had not found iodide of potassium useful.—Dr. MAHOMED had a case under observation of a woman, aged thirty-five, with very well-marked subcutaneous nodules and subacute rheumatism; no heart murmur. He treated her with salicylate of soda and in a fortnight the two nodules had entirely disappeared, although they were originally the size of horse beans. He asked Dr. Barlow in what proportion of cases of acute rheumatism he had found these nodules. He himself had only met with two cases in two years.—Dr. GLOVER had recently had a patient with subacute rheumatism and nodules about the hand, which improved under ammonia and iodide of potassium.—Mr. PARKER thought the rheumatic nodules occurred in cases of subacute rheumatism. In the specimens he had examined the nodules were over the deep fascia.—Dr. R. J. LEE mentioned a case in which these nodules appeared only on the right side of a child, and it was on this side only that choreic movements occurred. After two or three months small nodules appeared on the left side of the body.—Mr. CLEMENT LUCAS thought that in adults the nodules were larger and less readily traceable to the rheumatic diathesis. He related the case of a woman with these nodules on the knees and elsewhere. They were not absorbed, and ultimately were excised and found to consist of fibrous tissue. She had not had any rheumatic attack nor any cardiac bruit.—Dr. GILBART SMITH had seen two cases in women who had not had rheumatism nor heart disease, and were not influenced by treatment.—Dr. ANGEL MONEY had found the nodules in connexion with rheumatism in children,—in at least 50 per cent. of cases. He had seen them to appear and disappear in four days on the palm of a boy's hand. He had made autopsies on two children under ten years of age with these nodules and severe heart disease.—Dr. FOWLER remarked that in the cases he brought forward all the nodules occurred over points subject to pressure, and that in rheumatic fever the fibrous tissues in these situations were specially prone to become so affected.

Dr. COXWELL read a case of Cortical Tumour, with great Variety and Frequency of Epileptiform Seizures. Ten years ago, G. R——, a young man, then aged twenty, began to suffer from fits, which always had as their starting-point the right hand, and never had a greater range than the right arm and right side of the face. Five years later he came under the care of Dr. Gowers at the National Hospital for the Paralysed and Epileptic. He was admitted as an in-patient for the last time in February, 1882, under Dr. Radcliffe, who kindly permitted the publication of the case. He then had optic neuritis in the left eye, but not in the right. There was some paralysis of the right arm and right leg, but none of the face. The deep reflexes were all in excess on the right side, with right foot clonus. Dr. Coxwell during eleven months was enabled to make careful observation of the mode of onset of many of his epileptiform seizures. When the fits were frequent, an hour spent at his bedside was rewarded by a view of several fits. As the time was summer, he could lie

without danger with his limbs uncovered, and if they were placed in a position of semi-flexion or semi-abduction, as the case might require, the slightest initial movement could not fail to attract attention. In the numerous cases of cortical tumour which had been recorded the fits had nearly invariably been described as beginning in the same place. In this case, however, during the last year of the patient's life there was great variety in the starting place and range of the fits. The patient died in January, 1883. A large number of Dr. Hughlings Jackson's statements with regard to epileptiform seizures were exemplified in this case. Mention, for instance, was made of temporary paralysis of right side of face, or of right arm, caused by fits affecting those parts; of the connexion between the occurrence of aphasia and fits affecting the right side of the face; of the fact that when spasm spreads from the first affected side to the other, it passes to the leg of the second side and not to the arm or face. The patient had every variety of fit, including some of the ordinary epileptic type, characterised by sudden loss of consciousness and general convulsion. It had been stated that these fits do not occur in such cases; perhaps the greater and widely-spread instability which this kind of fit implies was the result of the extraordinary frequency of the fits, and the great duration of the case (ten years). There was a tendency at different times for some special type of fit to occur, sometimes the face alone being affected, sometimes chiefly the right arm, sometimes the whole of the right side, and so on. Perhaps the explanation was that the tumour created instability in cortical areas adjacent to that in which there were pathological changes, and that when the instability reached a certain degree of intensity, explosive discharges occurred in them, causing spasm in corresponding sets of muscles. The spasm having attacked the arm, nearly invariably proceeded upwards—extremely seldom downwards. One never saw a twitch at one joint—say at the elbow—then a twitch at the knee, and then at the mouth. In each case, on the contrary, there was a definite line of march of the spasm, either up or down a limb. These facts seemed well explained by the localisation theory. The tumour was found at the autopsy to be a glioma affecting the posterior parts of the first and second frontal convolutions, and the extreme summits of the ascending frontal and parietal convolutions on the left side. Its position therefore corresponded very fairly with what would have been expected from the fact that during the first nine years of his illness the spasm always commenced in the right hand. This man often had 200 or 300 fits a day. In the last year of his life 21,800 fits were counted.—Dr. BEEVOR had often seen this patient when he was in hospital, and he quite corroborated all Dr. Coxwell had said about the nature of the fits. He had tried to localise the lesion by tapping the head, and he found a tender spot ten centimetres above the left external auditory meatus, which corresponds to the posterior part of the second frontal convolution. He had found the cremasteric and abdominal reflexes less marked on the right than the left side. He had made observations on seventy cases of bilateral epilepsy, and found the knee-jerk increased and the plantar reflex absent for about five minutes after each fit, the one disappearing as the other reappeared. He thought that in some cases the eyes were turned to one side, and after the fit were turned to the other side. More severe than these were cases of Jacksonian epilepsy, and still more severe cases of paralysis after epilepsy, with occasional fits, all these symptoms being due to cortical lesions.—Dr. GLOVER asked if the patient ever hurt himself in any of his numerous fits.—Dr. COXWELL, in reply, said he had also found the tenderness in the spot mentioned by Dr. Beevor. He had never hurt himself in any of the fits.

Dr. R. J. LEE gave a short account of a second case of Creeping Eruption similar to that described by him in the eighth volume of the Society's Transactions. After referring to that description and to the report of the committee on the case, Dr. Lee stated that the second case resembled the first in its details. It occurred in a gentleman who affirmed that using a watercloset at Petersfield railway station was the origin of the affection, which began on one buttock, and spread till the spot had travelled many feet and even yards over the body, producing only slight irritation and practically no inconvenience. Dr. Lee advised excision of the spot; this was refused. The condition continued up to the time of the patient's death from heart disease twelve months later. Dr. Lee thought the disease was due to a parasite or animalcule, and that it was contracted by actual contact.

OPHTHALMOLOGICAL SOCIETY.

Congenital Unilateral Absence of Lacrymation.—Hæmorrhage into Sheath of Optic Nerve.—Third Case of Peculiar Changes in the Yellow Spot.—Malformation of Pupil.—Pseudo-glioma.—Sympathetic Muco-purulent Conjunctivitis.—Discussion on Sympathetic Ophthalmitis.—Paralysis of Convergence and Accommodation.—Treatment of Cystoid Cicatrices.

A MEETING of this Society was held on Thursday, Jan. 10th, Mr. Jonathan Hutchinson, F.R.S., President, in the chair. A discussion took place on sympathetic ophthalmitis, and an important case bearing on the geography of the central nerve nuclei for ocular movements was read.

Mr. STANFORD MORTON showed a case of Congenital Unilateral Absence of Lacrymation in a boy aged six years. During a fit of crying the right eye never wept. During a severe cold in the head there had been noticed some slight increase of secretion. Mr. Morton had not seen any weeping from the right eye, though the left wept profusely. The colour-sense of the right eye was perfect. The was no absence of smell. The lacrymal gland could not be felt on either side, but from the symptoms one might reasonably conclude that it was congenitally absent on the right side.

Dr. QUARRY SILCOCK exhibited specimens of Hæmorrhage into the Sheath of the Optic Nerve removed from a man aged twenty-eight, who died in St. Mary's Hospital from the effects of a fractured skull eight days after an injury. At the autopsy a fissured fracture was found traversing the posterior inferior angle of the right parietal bone and the right half of the occipital bone. The middle and anterior fossæ were intact. The brain was damaged. The sheath of the left optic nerve was distended in the subdural space. The left nerve was inflamed. In Dr. Silcock's case there was no fracture of the base of the skull or optic foramen, which Berlin had said was always to be found in such cases.

Mr. WAREN TAY brought forward a third case of Peculiar Change in the Yellow Spot. He briefly recounted the history of the three children who had been affected (*vide* THE LANCET, April 23rd, 1881). The third child was first seen when six weeks old, and then had double optic neuritis, but the macula lutea was healthy in each eye. When examined, at the age of six months, Mr. Tay noted well-marked optic atrophy and peculiar changes in the yellow spot. No light could be thrown on the affection, which was very remarkable.—Mr. JONATHAN HUTCHINSON asked whether there was consanguinity in the parents, also if only males were affected, and whether the changes were symmetrical in the two eyes. He thought that some idiosyncrasy of structure must be invoked to explain the cases. It recalled to his mind those cases of Kaposi's disease of the skin—xeroderma pigmentosum—where one sex only was as a rule affected.—Mr. WAREN TAY replied in the affirmative to the President's queries.

Dr. BEEVOR exhibited the case of a boy, aged nine, with Malformation of the Left Pupil, said to be congenital. There were two openings, one about as large as a pin's head, the other rather more than twice that size. Vision was defective on this side. The iris reacted to light and accommodation.—Mr. ADAMS FROST desired to know whether there was any history of syphilis in the case.—Mr. HUTCHINSON inquired whether Dr. Beevor regarded the case as one of persistent pupillary membrane.—Dr. BEEVOR replied in the negative to Mr. Frost, but thought the President's hypothesis might be the true explanation.

Dr. H. L. JONES showed a case of Pseudo-glioma in a child aged two years. On Oct. 4th the child had a fall, and two days later was convulsed, with fever, squint, vomiting, and retraction of head. Four days later there was acute iritis in the right eye and optic neuritis of the left eye. At the end of three weeks the fever left the patient, but a yellowish-white reflex was seen inside the right eye, and the tension of the eye was found to be much diminished.

Dr. BRAILEY brought forward a case of Muco-purulent Conjunctivitis of Sympathetic Origin. It occurred in a man aged sixty-six. The right eye was excised on Nov. 29th last. It was sightless from an injury by a piece of wood fifteen months previously. It appeared to recover after the blow, but three months later it inflamed again, and the sight gradually faded away. The left eye began to discharge soon after the accident to the right. It was no better, and indeed probably rather worse, after the excision of the right. There

was considerable gummy discharge, with conjunctival injection. It was quite well before the accident to the right eye.—Mr. STORY, of Dublin, thought it was rather stretching the point to suppose that the conjunctivitis was of sympathetic origin. He thought there was an unwise general tendency to explain all inflammations as of sympathetic origin.—Mr. ADAMS FROST inquired on what precise grounds Dr. Brailey had ventured to consider the case as one of sympathetic conjunctivitis. Was the conjunctivitis specially obstinate to treatment? Did Dr. Brailey regard the increase in the ophthalmitis after excision as evidence of a sympathetic origin?—Mr. NETTLESHIP asked what treatment had been applied to the eye when first affected. He thought it possible for an acute attack to be excited on a chronic one by atropine and bandaging, &c.—Dr. BRAILEY, in reply, said that he thought when the eye was made worse by incision that this was confirmatory of its sympathetic causation. He doubted if sympathetic conjunctivitis were extremely rare. His own impression was that it was at least as common as other forms of sympathetic ocular inflammation.

The adjourned discussion on Sympathetic Ophthalmia was then continued.—Mr. SPENCER WATSON remarked, with regard to the form of keratitis alluded to by Dr. Brailey, that he had seen a large number of cases with punctiform deposits on the cornea, which he regarded as of syphilitic origin in some cases, of rheumatic nature in others, whilst in yet other instances no traceable cachexia could be found. He had not met with many examples of it in sympathetic inflammation. Strong focal illumination was always necessary, and so he might have overlooked it. He asked what was meant by sympathetic ophthalmitis? On what grounds ought we to conclude that a case of conjunctivitis was sympathetic? He thought that in many cases of glaucoma of the second eye there was no evidence to support the view that the glaucoma was sympathetic to the same disease of the first affected organ.—Dr. BRAILEY referred to the cases of sympathetic keratitis, in which he believed dots on the posterior surface of the cornea always existed. But these dots were extremely rare in syphilis, and rarer still in rheumatismal affections. He stated that Mr. Milles, at Moorfields, had confirmed this experience. He was certainly of opinion that sympathetic conjunctivitis could occur in an uncomplicated form, and also sympathetic neuritis. The causes of sympathetic inflammation were manifold. In some, suppurative inflammation; in others, plastic iritis after perforating and non-perforating wounds. The theory of direct transmission would not hold water. If that be so, by what route was the inflammation transmitted? He thought we must fall back on the theory of reflex nervous irritation. Indeed, the balance of all indirect evidence was in its favour. If we could get an injection of the second eye, there was surely no reason why an inflammation could not be set up by similar means. The reflected nervous irritation might impair the nutrition of the second eye by damaging the nervous centre controlling the nutrition of the two eyes.—Mr. STORY could not agree with the remarks of Mr. Brailey. The peculiar life-history of the sympathetic irido-choroiditis made it improbable that it should be due to a reflex nervous irritation. A French oculist had given a list of ocular diseases known to Mr. Story as causative of sympathetic ophthalmitis. There were no set of experiments either in physiology or pathology which had been able to prove that an inflammation could be set up as the result of a reflex nervous irritation; whilst Lebert's experiments with penicillium glaucum had made it possible for the theory of direct transmission to be the correct one.—Mr. NETTLESHIP said that it would conduce to a better investigation of the cases of sympathetic ophthalmia if Dr. Brailey would bring forward all the details of his cases. It was only by affording every particular that the merits of each case could be decided. He did not understand whether Dr. Brailey believed that there could be a simple uncomplicated keratitis; although Dr. Brailey had clearly expressed his opinion that simple conjunctivitis could be of sympathetic origin. In the neuritis associated with sympathetic ophthalmitis we had to do with quite a different thing from ordinary optic neuritis. But he wished to know whether a sympathetic neuritis could occur without any other inflammatory complication. With regard to the mode of transmission of sympathetic ophthalmitis, he questioned whether much ought, in the present state of our knowledge, to be said, because the examinations of the parts concerned, so far as he knew, must have been very few and fragmentary. Take the ciliary nerves, which were generally cut so close to the eyeball, and were so fine that it would be difficult to make an examination and difficult to prove that there was no inflammation spreading along them. He thought that what had been learnt during the past few years through the labours of Gowers, Mackenzie, himself, and others, with regard to optic neuritis, was a warning not to be too rash in speaking of the matter. It had been proved that probably in all cases of optic neuritis the papillitis was due to a descending inflammation. If that fact had only been lately determined with respect to a large nerve like the optic, we should be on our guard against denying the presence of inflammation of the ciliary nerves in cases of sympathetic ophthalmia.—Mr. WAREN TAY asked whether anyone had seen a case where the lens was studded with a number of simple dots, and yet recovery of eyesight had ensued. He also inquired of Dr. Brailey whether sympathetic ophthalmitis occurred when the injured eye was excised a very short time after the injury was inflicted.—Mr. J. B. LAWFORD suggested that if the ciliary nerves were involved, we might expect in some cases that the inflammation would extend farther back so as to affect the meninges and occasion symptoms of meningeal affection, but such was not the case.—Mr. MCHARDY asked how long after the excision of the sound eye the conjunctivitis had occurred in the second eye of Dr. Brailey's case. He referred to a case published by him in the St. George's Hospital Reports, where conjunctivitis came on three weeks after removal of the damaged eye; it spread in spite of treatment, and eventually there was typical sympathetic inflammation. The cases of definite typical nervous iritis with spots which he had seen had almost all occurred in women either about the climacteric period or in association with some uterine derangement.—Mr. JONATHAN HUTCHINSON could confirm Mr. McHardy's account of cases occurring in females, and he thought that it might perhaps be possible to recognise in the future a class of cases of neurotic ophthalmitis resembling sympathetic ophthalmitis in their symptoms and course, but not dependent on any sympathetic cause. Perhaps some forms of rheumatic inflammation were of this nature.—Dr. BRAILEY said, in reply to the inquiry as to what was to be included, in his opinion, within the term sympathetic ophthalmia, that if the ordinary liability of a healthy eye to any given disease were as one in a thousand, and if in one eye, the fellow of which was affected, it was one in a hundred, then he would regard the occurrence of the disease in the latter case as due to sympathetic action.—Mr. ADAMS FROST protested against the statement that there was no line of demarcation between hyperæmia and conjunctivitis. He was in favour of the view of direct spread of the inflammation, and not of the theory of reflex nervous irritation.

Mr. EALES read the notes of a case of Paralysis of Convergence and Accommodation. The patient was a little girl aged thirteen, who came under his care on June 1st, 1883, suffering from complete suppression of all power to converge the eyes, together with paralysis of accommodation, and the associated contraction of the iris in each eye, though the pupils reacted well to light. From the history of the case the condition had commenced in March. The patient had never menstruated, had always had good health, having suffered from no illness except the usual ailments of childhood and a mild attack of typhoid fever uncomplicated by relapses or sequelæ, and none of them related in point of time with the occurrence of the ocular affection. Her mother died of tubercular phthisis; her father was subject to gout. There was no evidence or suspicion of syphilis or of diphtheria, and no history of headache or vomiting. The patient was spare and slight, but apparently a healthy and cheerful child. On examination the bilateral movements of the eyes, in all directions except convergence, appeared to be normal. The disc and fundus of each eye were healthy (V. $\frac{6}{6}$). The field of vision was normal and colour vision good. There was no other evidence of organic nervous disease. The patellar-tendon reflex was normal. There was no anæmia. Treatment by strychnia and iodide of potassium had had no effect upon the ocular condition, which persisted at the time of making the report. In the absence of any evidence of coarse intra-cranial disease, Mr. Eales attributed this condition to a degenerative change in the nuclei of the third nerve, which had been shown by Hensen and Volckers to preside over the functions lost and to be situated in the neighbourhood of the aqueduct of Sylvius; but what had caused this degeneration he did not

venture to predict in the absence of any clear indications.—Mr. J. B. STORY (Dublin) advocated the use of nitrate of silver in the treatment of cystoid cicatrices. In one of five millimetres diameter, occurring after a cataract extraction, he cauterised about a dozen times in the course of a month, having previously split open the cyst with a Graefe's knife. The cure was perfect and so far permanent. Mr. Story corroborated von Graefe in assigning a very small opening for the communication between the cyst and the anterior chamber, and even suggested that in some cases no such communication existed at all. In the case treated by him no effect was produced on the anterior chamber by the escape of the fluid. He, also, like von Graefe, had found the tension generally subnormal in these eyeballs, and had found hernia iridis a frequent forerunner of cystoid cicatrix, but the hernia was not to be regarded as either the cause or the first stage in the growth of the cyst. The eye tolerated the nitrate of silver perfectly, vaseline being applied to prevent the effect from spreading too far. Mr. Story suggested that the actual cautery might be used with equally good results in these cases.

EPIDEMIOLOGICAL SOCIETY.

A MEETING of the above Society was held on Dec. 5th, 1883, Dr. Norman Chevers, President, in the chair.

Sir WILLIAM SMART, K.C.B., M.D., R.N., read a paper entitled Scurvy in its Bearings on Explorations by Sea, of which the following is an abstract:—The author stated that we owe to Dr. James Lind, physician of Haslar Hospital, the only classical work extant on scurvy, which has been reprinted recently in Paris. He testified to the lesions described by Poupart, he discarded the then prevailing idea that the use of salted meats was the exciting cause, further than from their being less digestible and therefore less nutritious, and he taught that the want of vegetable food alone was not its cause. With regard to remedies, he considers that fresh vegetables and ripe fruits are the best and the most effectual preservative against it. He offered many illustrative examples of the occurrence of the disease under very dissimilar circumstances, among which are some of its appearance on ships in Portsmouth Harbour and at Spithead, on which the men were well supplied with fresh beef and vegetables. It broke out also at Haslar Hospital, but then the fresh vegetables were not in the dietary. Sir William next alluded to the many voyages made from the beginning of the eighteenth century to 1859, during which, in some cases, scurvy had caused terrible losses amongst the explorers, in others the disease had been entirely absent, and he considered that the ordinary dietetic resources of a ship will suffice to ward off scurvy during the first winter in the arctic regions, but after the second winter the disease will be almost certain to break out. Cases of exemption from scurvy have been known amongst men passing the winter in high latitudes, but on the shore in huts and subsisting in great degree on the products of the chase. In huts buried in snow, and especially in those constructed of it, the moisture exhaled from the lungs is frozen to the walls, while in a heated between-decks it is breathed over and over again, and when condensed on the walls by admission of the purer external air, it is the constant cause of most detrimental dampness, and considered by Sir George Nares as being a very effective cause of the developed predisposition to scurvy. The higher development of the scorbutic diathesis amongst the crew of the *Alert* than in the *Discovery* in 1875-76 may thus be ascribed to the smaller amount of fresh animal food obtained on the *Alert*, and to the moisture of the heated air in the dwelling deck; and as it was with these ships, so it may be expected to continue until the science of naval engineering shall have devised means of supplying steady currents of warmed air, drawn from outside the ship, heated in a chamber, and equally distributed from it to the interior by fans after the manner of ventilation in ships of the *Devastation* construction. This plan might also be adopted to preserve meat in arctic expeditions, as is the case in the Australian steamers which carry meats. In conclusion, Dr. Lind, when overthrowing the theories of his day with regard to scurvy in fleets, adopted the maxim of *dies docet diem*, which to a certain extent is applicable in our own day. Experience seems to show that in the arctic regions the compulsory enjoyment of any fresh air with the necessity to obtain fresh animal food from indigenous animals is more conducive to health and the avoidance of scurvy among castaways than life in ships, where men dwell in a warm, moist, and vitiated atmosphere, and are fed on the best of ship's diet, with lime-juice as an anti-scorbutic, but without the advantage of much fresh animal food, which is second only to fresh vegetables in the prevention of scurvy. Dr. Neale, whose experience was acquired in the voyage of the *Eira* in a single winter on Franz Josef Land, also holds the same opinion, but how far a second winter in regions of ice would confirm his belief still remains to be proved. And although the health of the *Eira's* crew was maintained through one winter on a diet of fresh animal flesh and blood, and without lime-juice, yet its reputation is in no great degree shaken by modern experience as to its being the most portable substitute for green vegetables and fresh meats.—In the discussion which followed, the President, Dr. Dickson, Dr. Colam, and Sir Joseph Fayrer took part.

Reviews and Notices of Books.

A Treatise on the Diseases of the Nervous System. By JAMES ROSS, M.D., F.R.C.P. Second Edition, revised and enlarged. London: J. and A. Churchill. 1883.

HE who would attempt to write a treatise on the diseases of the nervous system ought to be possessed of three important faculties: great resolution, indefatigable industry, and a rare power of construction. Without courage a proper conception of the dimensions of the task will not be grasped. Without industry the end will never be reached. And without the third quality it will be impossible to produce a well ordered and finished work. The perfect combination of this trinity of gifts is perhaps not to be looked for. But in proportion as that ideal is reached will the value of the work be enhanced.

The arrangement of the present work is good, thorough, and systematic. The first book is devoted to the consideration of the general pathology of the nervous system. It seems surprising that, notwithstanding the able advocacy of Hughlings Jackson, the principle of dissolution should not have obtained more general application in the study of diseases, especially those of a nervous kind. In the chapter on the structure and functions of the nervous system Dr. Ross has assigned not unimportant places to the teachings of Herbert Spencer and Hughlings Jackson. Whether the last-named philosopher would acquiesce in the view which recognises examples of dissolution in structural changes we do not know; for although Dr. Jackson has been credited with perceiving instances of dissolution in the material alterations which are met with in inflammation, we have some grounds for believing that this was going a step farther than was intended. The question may indeed be discussed whether disease does always tend simply to undo the several foldings which evolution had performed, or whether morbid processes may not manifest themselves in structural departures which cannot be classed in the above category of dissolution. Perhaps it would hardly be in conformity with what is already known to conclude that every disease is but an orderly degradation of structure and function. We do not deny that such may be the case. But we think it more probable that other methods may exist. We should scarcely call that a disease which improved the structure and rendered more perfect the function. And hence may partly be accounted for the possible fallacy that all disease simply *dissolves* the special and recent, leading to the general and more ancient. The passage is from the most to the least organised; from the unstable to the more stable. But that need not be in the manner of dissolution, and may be in the fashion of destruction.

The work is specially strong throughout in the anatomy and physiology of the subject, whether we consider them from a comparative or an embryological standpoint. The chapters

on the vascular supply and development of the spinal cord may be referred to as instances of this strength. These portions are illustrated by numerous adequate woodcuts. The development of the nerve nuclei of the spinal cord here given is lucid, and the associations which are described between the organisation of these centres and the vascular supply, together with relations in time and space of the different nuclei, are of much interest. Abundant evidence may be found in the volume of the fondness of the author for long names. No doubt lengthy combinations have their advantages, and may save much circumlocution; and, after all, the use of them is for the most part a harmless indulgence. Indeed, for some students a positive gain may sometimes accrue from the employment of such words, for they may form rallying points round which many other related facts may naturally cluster, so that the whole group becomes easy to remember. To say that this case is one of cutaneous æsthesioneurosis, that that patient is the subject of a visceral kinesioneurosis, and that an instance of a muscular trophoneurosis may be observed in the next person, may sound a little alarming to the vulgar mind. But after some hesitation the ordinary reader may come to perceive that the expressions are admissible, not only on the score of brevity of description, but also because they so precisely mean what they are intended to convey. We may say "yes" at once in anticipation of the inquiry, Is the book up to date? Indeed, we have even been surprised to find how efficient the work is in this respect. Nearly everyone who can claim to have written anything within the last few months will find his views, and, so far as we know, his references, accurately given. A comparison of the present work with the first edition will show that the chief difference between them consists in the insertion of copious references, which render the treatise invaluable to special workers. In the article on Post-diphtheritic Paralysis we miss a reference to a short paper by Dr. Abercrombie (communicated to the International Medical Congress held in London), of which the chief feature was the evidence that in children the paralysis was frequently fatal, much more so than most writers seem to be aware. Otherwise Dr. Ross's description of this interesting and suggestive neurosis is fairly full.

As a complete effort to deal in a single treatise with the whole of the diseases of the nervous system, this laborious work ranks as the best which has yet appeared in the English tongue.

Elektrizitätslehre für Mediziner und Electrotherapie. Von Dr. J. ROSENTHAL und Dr. M. BERNHARDT. Berlin: August Hirschwald. 1884.

THE middle-aged and senior general practitioners of to-day may ask the question, "Of what value in the practice of medicine is electricity?" And the response may come quite as tersely, "Of much practical value." It is true that the number of principles of practical application is not large, though very important. It is true that in many neural diseases electricity affords but little information; but the undeniable worth of the agent as an instrument of diagnosis, and more rarely of treatment, is thoroughly established. There can be no doubt, for instance, that a striated muscle which does not react to a fairly strong faradaic excitation is decidedly diseased. Judged of on the merits of this one fact alone, electricity is entitled to a high place in the class of things which aid diagnosis. When science has crystallised out one such truth of practical value, we may surely hope for additions to this nucleus.

The book which we have to notice now is one which the bulk of the medical profession would probably regard as very learned. Nevertheless, it is a volume which must stand high in the estimation of those most capable of judging. The present effort is composed of two more or less distinct parts, each edited and written by a different author. The first portion is the work of Rosenthal, and has already gone through two editions. Dr. Bernhardt is the author of the second. We shall do but little more than indicate the contents of the volume. The therapeutical department of the science and art of electricity is still in so fluid a condition that there is abundant room for controversial statements, but it can serve no good purpose to avail ourselves of this uncertainty. And so long as the unsettled aspect of the question is properly recognised, there can be no real need for controversy. As in so many other fields of knowledge, more *facts* are what is wanted. And the appearance of new truths actually limits the ground of contention.

After considering the nature, distribution, and effects of electricity and electrical currents, together with the various modes of their production, Dr. Rosenthal proceeds to inquire into the nature of electrolysis, polarisation, and the constant current. The strength of the current and the facts concerning the resistance to the passage of the current are illustrated, and Ohm's law is mathematically expounded. Electro-magnetism and the production of the electrical current by induction are explained. The management and use of the galvanometer form the subject of another chapter. Dr. Bernhardt's share of the volume opens with a description of the apparatus and appliances used in electro-diagnosis and therapeutics. The chapter on the "Motor Points," and the methods of testing the motor nerves and muscles by means of the faradaic current, are specially good and well illustrated by diagrams. Something is said about the electro-diagnosis of diseases of the sensory portion of the nervous system, for knowledge of which we are almost entirely indebted in actual practice to the patient; the value of such information is therefore not nearly so great as that afforded by the examination of motor organs. The last portions of the book are devoted to the electrical treatment of diseases of the central and peripheral nervous systems, and the various organs and parts of the body. The literature of the subject is very fully given, reference being made to 417 different contributions. As an able attempt to place before the profession what is known of the science and practice of electricity in medicine the work deserves to meet with a large success.

OUR LIBRARY TABLE.

Archives Italiennes de Biologie. Under the direction of C. EMERY and A. MOSSO. Second year, 1883. German Baillière.—This, which constitutes the first part of the fourth volume of the Archives, maintains the reputation of the previous parts. The memoirs it contains are:—1. C. Emery, who gives an account of the Zoological Station at Naples, which is interesting in view of the similar one that Prof. Lankester and others propose should be formed with the surplus funds of the Fisheries Exhibition. 2. Charbon in Birds, by E. Perroncito. 3. S. Trinchese: On Diffused True Kidney in some Molluscs. 4. J. Bellonci: On the Optic Lobes of Birds, with one plate. 5. L. Pagliani: On the Oscillations of an Endemic of Typhoid Fever in Paris and their relations with the Rainfall and Sewer Discharge. 6. V. Corvello: Paraldehyde as antagonistic to Strychnia. 7. P. Pellacani: On the Active Principles of the Nigella Sativa. 8. P. Foa and P. Pellacani: On the Fibrinogenous Ferment and on the Toxic Action exercised by some Fresh Organs. 9. F. Coppola, the Genesis of Ptomaines. 10. A. Capparelli: Researches on the Poison of Triton Cristatus. 11. C. Emery: Embryological Researches on the Kidneys of Mammals, with one plate. 12. C. Golgi: Researches on the Histology of the Nervous Centres, with four plates. There are some necrologies and reviews.

Ueber die Bedeutung der Chemie in der Medicin. Von Dr. WILHELM LEUBE. Berlin: August Hirschwald. 1884.—

This excellent brief history of the progress of chemistry in its relation to medicine formed the subject of an opening address delivered by Dr. Leube in the University of Erlangen. The history of one natural science presents many features in common with that of another. A good illustration of the order of natural progress, from the uniform and homogeneous to the diverse and heterogeneous, is afforded in this review of the progress of chemistry. In the beginning, chemistry and medicine confounded one another in the want of knowledge of either. Later on we find chemistry asserting its own rights. And having established its autonomy, we find it arranging the internal atoms of its molecules after its own precise method. Dr. Leube takes us through many more than these chief phases of its history, and illumines the otherwise seemingly level but onward course by dates and names. The little book is interesting reading to those who like such methods. And we may add that we think the historical method well worthy the attention of all who have time to bestow on it. It is not the easiest way, and certainly not the shortest, to a knowledge of any subject; but since it represents the natural order of events, it must commend itself as a philosophical method. On rising from the perusal of Leube's work the mind is filled with the hopes and aspirations of the future of molecular chemistry.

The Journal of Mental Science. January, 1884. Edited by Drs. HACK TUKE and SAVAGE.—The current volume contains the following original articles:—The Special Training of Asylum Attendants, by Campbell Clark; Is Legal Responsibility acquired by Educated Imbeciles? by G. E. Shuttleworth; Definitions of Insanity, by William Huggard; On the Pathology of Mania, by Joseph Wiglesworth; Visceral and other Syphilitic Lesions in Insane Patients without Cerebral Syphilitic Lesions, by Wm. Julius Mickle; The Basis of Consciousness, an Answer to Professor Cleland, by Charles Mercier. In addition to abundant clinical notes and cases, with seven reviews and a psychological retrospect, there are many notes and news of interest to the alienist.

The Bristol Medico-Chirurgical Journal. December, 1883. Bristol: J. W. Arrowsmith.—The original papers contained in the present volume are all of interest. We may make special mention of an Epidemic of Tetanus, by Alfred Sheen, M.D.; a Study of "Medical Posture," by John Kent Spender, M.D.; Retinoscopy, by Arthur B. Prowse, M.D.; Abdominal Section in Perforating Ulcer of the Stomach—a suggestion. Amongst the clinical records, perhaps the most interesting cases are those of Muscular Atrophy and Degeneration, by J. Fenton Evans, M.B., illustrated by neat photographs.

The Sanitary Regulation of Bakehouses. By the Author of "Local Loans." London: Knight and Co. 1884.—The sanitary regulation of bakehouses having during the past session been transferred from the factory inspectors to the several sanitary authorities, the duty of enforcing the various requirements will largely fall upon the medical officers of health and inspectors acting under their supervision. Unfortunately the law relating to this subject lies hidden in numerous Factory and other Acts, and, no consolidation Act having been passed, many officers will feel the need of some work which shall clearly explain what are the duties and obligations imposed upon them, and how their new powers may best be carried out. This need has now been supplied by the issue of the volume under review. The work is stated to have been prepared by the author of "Local Loans," and although his name does not transpire it is one which is well known in official circles to carry with it a guarantee for a full knowledge of the subject dealt with. The past legislation with regard to bakehouses is first reviewed, the opinions of many metropolitan medical officers of health being quoted as to the question whether the needed inspections can best be carried out by the local or central authority. The present law is then discussed in detail, the duties devolving upon the medical officer of health and the inspector of nuisances being explained. A chapter is devoted to the discussion of the necessity for the sanitary regulation of retail bakehouses, and in an appendix are included such portions of the Factory and Workshop Acts, 1878 and 1883, as relate to such establishments. The work, which is by no means voluminous, and the contents of which are arranged in a manner calculated to facilitate easy reference, appears most opportunely.

New Inventions.

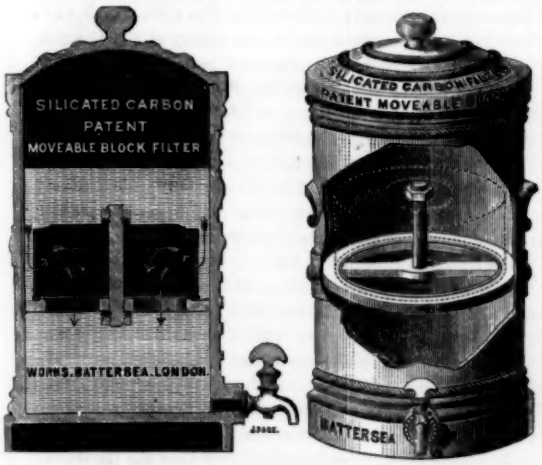
AN IMPROVED PILE CLAMP.

MR. HENRY W. FREEMAN, F.R.C.S.I., Surgeon to the Royal United Hospital, Bath, has produced an improved pile clamp, the shanks of which are made very stout and cranked at a right angle, the joint being arranged to allow the blades of the instrument to retain their parallel position, however widely opened. A self-acting spring rack-and pinion is fitted to the extremities of long eight-inch handles, and immense crushing power in the blades can be produced and maintained as long as desirable during an operation One of the blades is furnished with a raised serrated rib on its inner margin, and this fits into a longitudinal groove in the corresponding margin of the opposite blade, and the flat surfaces of the blades are faced with ivory in the usual

manner. The clamp has been made in two sizes, the blades of the larger instrument measuring three inches and three-quarters in length, an inch in width, and a quarter of an inch in thickness, and is capable of crushing completely external piles. The smaller one, measuring three inches by half an inch, has been used only for internal piles, and has but little crushing power. Paquelin's benzoline cautery has been used at a dull red heat in connexion with these clamps, the stump of the pile being generally cut off level with the blades, without secondary hæmorrhage occurring in a single case. The smaller clamp for internal piles has been used with Craddock's widely fenestrated rectal speculum. In ovariotomy and operations for nævi these clamps will be found also of service. They are manufactured by Hancock of Westgate-street, Bath.

IMPROVED FILTER.

THE Silicated Carbon Filter Company, Battersea, have submitted to our notice a filter which exhibits some improvements on apparatus of the kind in general use. These improvements may be summarised as follows: 1. The use of cement in the construction of the filter is dispensed with. 2. The filtering block of carbon may be wholly removed



and may either be renewed at trifling cost or thoroughly cleansed. This, however, is an advantage it shares with other filters. 3. There are no metallic joints or fastenings to corrode. These are elements which will no doubt make this filter a favourite with the public.

MESSRS. BOWER AND KEATES AT HOME.

WHEN men are in any kind of trouble it is very important to know what their neighbours think and say about the matter and about them. Public censure is even tolerable when neighbours and friends sustain and support. The reports of the meeting of the friends of Messrs. Bower and Keates, in the schoolroom of St. John's, East Dulwich, leave no doubt in the minds of readers that Messrs. Bower and Keates enjoy this to the full. They are still, we believe, dogged by the deluded parents of the child whose life they bravely and skilfully tried to save, and did really prolong. But the respect withheld by them is amply accorded by their other patients and by the public. The meeting was most ably and fitly presided over by the Vicar of East Dulwich, the Rev. T. A. Warburton, D.C.L., who was supported by Mr. Louis Schlesinger, who has been indefatigable in promoting the local subscription, and by various gentlemen of the neighbourhood. The schoolroom was full; it was gaily decorated gratuitously by a neighbouring florist; the choir of the church supplied harmonious music; and everything combined to render the occasion one of congratulation and satisfaction to Messrs. Bower and Keates, on which they and their posterity may look back with interest. The speech of the Vicar was altogether admirable in its grasp of the facts, and in its strong, quiet denunciation of the action of the Public Prosecutor. So, too, and full of good humour, was the speech of Mr. Schlesinger. The beautiful salvers, each bearing a purse of 100 guineas, and the whole feeling of the meeting, rather overpowered the happy recipients. But they spoke briefly and to the point.

Dr. BOWER, who was received with loud cheers, said that the subscribers to the testimonial had done good to the medical profession, to the legal authorities, and to the public. They had done good to the public, for if such proceedings as those which had been taken against himself and his partner were to be permitted, medical men would never be able to do their duty. They had done good to the legal authorities by teaching them what they ought to do and what they ought not to do. The public prosecutor was, so to speak, green at his work, and the medical profession, so far as they were concerned, had had to teach him his business, though at its own cost. The public prosecutor had failed to prosecute in cases which he was asked to prosecute; and he had prosecuted medical men where he ought not to have prosecuted. In the present case, if some of the chief men of the medical profession had been appealed to, the public prosecutor would have been told that no prosecution ought to be instituted. One doctor had already gone to his grave under this system of prosecution—he alluded to the late Dr. Haffenden, who, it had since been indirectly proved, only did that which any medical man would have done under the circumstances. In the case which had led to the proceedings against himself he (Dr. Bower) found a poor child suffering from diphtheria, and in such a condition that, if no further steps had been taken, it would have died in twenty minutes or half an hour. In order to give it a chance of life he made an opening in the windpipe. That was an operation which it was the bounden duty of every doctor to perform under the circumstances, and which if it had been his own child he should have requested to be performed. True, he was not able thereby to save the child's life, but he prolonged it for upwards of thirty hours. And for aught he knew at the time, the operation might have been successful. If, as the chairman had stated, he had been a callous man, he might have contented himself with looking at the little sufferer and saying that nothing could be done; but with the simple desire to save life he performed an operation which was approved in all modern hospitals, and which in 14 or 15 per cent. of cases was successful.

Mr. KEATES spoke to the same effect, but more briefly.

Dr. GLOVER, after many years' connexion with THE LANCET, testified that there had never been such a unanimous and hearty outburst of sympathy with ill-used medical men as in that case. He congratulated Messrs. Bower and Keates on having such friends as the Vicar and Mr. Schlesinger and those who filled the room. He also bore witness to the general generosity of patients and the public in judging medical men, and rejoiced in the proof that meeting afforded that until the Public Prosecutor arrived at a sounder discretion in the exercise of his functions the public itself would vindicate and compensate medical men.

Dr. BURNET, being also called on by the chairman, as one of the honorary secretaries of the Medical Fund, mentioned the principal facts connected therewith, and the great response of the profession to the appeal made by the committee, presided over so heartily and ably by Sir William Jenner.

The meeting concluded with a vote of thanks to the Vicar, to whom, in the name of the profession, we beg to tender our thanks for his action in this matter. The following is the address, which, duly framed, was presented respectively to Messrs. Bower and Keates.

To EDMUND BOWER, Esq., M.D., M.R.C.S., L.R.C.P.
To W. COOPER KEATES, Esq., M.R.C.S., L.R.C.P., L.S.A.

We, the Committee, in the name of your patients, friends, and neighbours, desire to convey to you the expression of our sympathy with the severe ordeal you have had to undergo on two recent occasions, and to assure both of you of our esteem and regard, as well as of our unabated confidence in the conscientious and skilful discharge of your professional duties. If anything could tend to enhance our faith in you, it would lie in the fact of your having fearlessly met, and regardless of cost, the charges preferred against you. We venture to hope that the unanimous expression of our deep-felt sympathy will somewhat assuage the anxiety and worry you have been exposed to. It may gratify you to learn that at the meeting held on the 13th November last it was enthusiastically proposed, and carried *nem. con.*, that not our mere sympathy, but a tangible proof thereof, should be publicly tendered to you. We have, therefore, invited you to be here to-day to receive at the hands of your patients this address in duplicate with the accompanying testimonial, the donors of which latter number 133.

On behalf of your patients, &c., &c.:—

T. A. WARBURTON, D.C.L.	LOUIS SCHLESINGER.
JOHN BROWN.	C. R. KELHAM.
ALFRED BIRT.	W. H. CHARLTON.
TH. B. GRINSELL.	C. F. SEYFANG.
EDWARD OWEN.	M. WATTS.

Peckham-rye and Dulwich, S.E., Jan. 15th, 1884.

THE LANCET.

LONDON: SATURDAY, JANUARY 19, 1884.

IN the account of the transactions of the last meeting of the Council of the Royal College of Surgeons of England given in our columns last week (pp. 88, 89), we published the report and recommendations of the Committee on the Charters and Bye-laws of the College. These recommendations were, as we then stated, approved and adopted by the Council, and ordered to be entered on the Minutes. In addition to the changes recommended by the Committee, and adopted by the Council, it was referred to the Committee to consider Section 14 of the Charter 7th Victoria (p. xxxvii. *seq.* of the Calendar), and to report whether any alteration should be made therein respecting substitute members of the Council. Through inadvertence, an omission occurred in our report of the last meeting of the Council. We take the earliest opportunity of supplying this omission, and of calling the special attention of all the Fellows and Members of the College thereto. Mr. ERICHSEN gave notice of the following motion: "That in accordance with Section 18 of the bye-laws, the President be requested to convene a meeting of the Fellows and Members of the College, to take into consideration the proposed alterations in the Charters." Mr. ERICHSEN'S political sagacity and his courteous deference to the feelings of the body of the Fellows and Members of the College have given the Council an opportunity of avoiding an unpleasant predicament, and of saving itself from the perpetration of a possible insult towards its constituents. We would fain believe that in any case the President, *proprio motu*, or with the concurrence of the Council, would convene a meeting of the Fellows and Members to consider, discuss, and finally approve any proposed alterations in the Charters, before seeking the consent and authority of the Privy Council. The possibility that a bare majority of the members of the Council might have proposed and effected radical alterations in the Charters of the College, without the knowledge and sanction of the Fellows and Members, provokes reflections that we prefer not to encourage. On the official list of the Royal College of Surgeons there are the names of 16,258 Members and 1166 Fellows, who are also Members. Each of these has corporate rights, and is more or less affected by the provisions of the Charters and Bye-laws. The Council, on the other hand, consists of only twenty-four Fellows, elected by the suffrages of the Fellows to conduct the ordinary legislative and executive affairs of the College. As debated and debatable questions in the Council are decided by a vote of the majority it follows that any thirteen Members in a full meeting of the Council may propose and enforce on the one hand, or oppose and defeat on the other, any proposed alteration whatever. So on the present occasion a bare majority of the Council has it in its power to carry out important alterations in the Charters, not only without the recognised knowledge and sanction of the Fellows and Members, but even in opposition to their wishes. That this power will be exercised we cannot, will not, believe. Mr ERICHSEN'S timely notice of motion has indicated the propriety of consulting the Fellows and Members, and the present President of the College is not likely to be wanting in any manifestation of good-will and courteous regard for the wishes and opinions of those whom he represents.

A general meeting of the Fellows and Members would otherwise be extremely opportune at this moment. There have only been two occasions in the history of the College on which the Fellows and Members have authoritatively assembled within the College to consider and discuss collegiate affairs. The first was on March 24th, 1870, when the President convened a meeting on the requisition of 250 Fellows and Members, the second on June 28th of the same year, when the President, Mr. E. COCK, convened a meeting on his own responsibility. It is a remarkable and not altogether satisfactory circumstance that no meeting of the Fellows and Members has been held since that time—that is, for nearly fourteen years. Still more remarkable and still less satisfactory is the fact that comparatively few of the Fellows and Members seem to be aware that they may exercise the right, with certain reasonable limitations, of meeting within the College for the discussion of matters affecting themselves and the College. It is impossible to acquit the College authorities of disingenuousness in this matter. The opening sentence of Clause 18 of the Bye-laws (p. lxii. of the Calendar) manifests too plainly the distrustful attitude of the authorities of the College towards the Fellows and Members. The harsh and antiquated formula, "No business whatever shall be transacted, nor any matter be discussed or debated, at any meeting or assemblage convened by or under the authority of the President or the Council," &c., should in all fairness and honesty be superseded by a newer, truer, and more friendly one: "On the requisition of thirty Fellows or Members, the President or Council may convene a general meeting of the Fellows and Members; or the President, with or without the concurrence of the Council, may convene a meeting of the Fellows and Members without requisition," &c., in accordance with a resolution of the Council of February 10th, 1870.

An accurate appreciation of the relations of the Fellows and Members to the Council, and to the constitution of the College generally, is of such importance that it may be well to relate the history of the right to hold general meetings of Fellows and Members within the College. Shortly after his election as a Member of the Council, in the year 1869, Mr. ERICHSEN brought forward a proposition to give the Fellows the option of holding meetings within the College. On this a committee was appointed (Dec. 9th, 1869), "to consider in what way facilities may be best afforded for holding from time to time in the College meetings of the Fellows and Members, in accordance with the provisions of the Bye-laws, Section 18. This Committee met on Dec. 23rd, and drew up a report, which was presented to the Council on Jan. 13th, 1870, and finally approved and adopted on Feb. 10th, 1870. The tenor of the report was, first, that no other facilities were necessary for the holding of occasional meetings of Fellows and Members than that the Council should declare its willingness to convene such meeting under Section 18 of the Bye-laws when requested to do so for any specific and

proper purpose by any considerable number of the Fellows or Members, and that the Council should recognise its power to convene any such meeting when it sees fit, without requisition; second, as regards meetings to be convened on requisition, that the number of requisitionists should be at least thirty."

This determination of the Council to allow meetings of Fellows and Members within the College was soon taken advantage of, for in February, 1870, a requisition signed by 250 Fellows and Members was forwarded to the President to summon a meeting "to discuss and consider the present position of the College with respect to probable legislation," &c. This meeting was held on March 20th, 1870, and an adjourned meeting on April 22nd. The second authorised meeting was, as we have said, held on June 28th, 1870, to consider and discuss a clause of the Medical Act Amendment Bill, and was convened on the sole authority of the President.

We have stated that there have been only two general meetings held in the College with the sanction of the President and Council. A memorable meeting, *unauthorised*, was, however, held fifty-three years ago.

In 1831 the advisers of WILLIAM IV. had forbidden the attendance of naval medical officers at the Royal *levées*. This matter, as affecting the dignity of the whole medical profession, was warmly taken up by the late Mr. WAKLEY, and in THE LANCET of Feb. 12th, 1831, it was suggested that the question should be taken into consideration on the 14th of that month, at the College of Surgeons, when the Members would meet to hear the Hunterian Oration. Accordingly, before the Oration, a very large meeting passed two resolutions, brought forward by Mr. WAKLEY, expressing astonishment at the order, and requesting the President and the Council to memorialise the Lords of the Admiralty on the subject. When the President, Mr. KEATE, entered for the Oration to be delivered by Mr. ANTHONY WHITE, Mr. KING, who had been deputed to address the President, began to do so; but he was interrupted by Mr. KEATE, who begged that the Oration might be proceeded with, and promised to remain at its conclusion to hear any remarks that might be addressed to him. After the Oration Mr. KEATE put off his president's gown before he would hear Mr. KING, and then declared he would hear the remarks in his *private*, not official, capacity. Eventually, however, he received the resolution passed by the meeting. No action was taken upon this by the Council, which declared the proceedings to have been irregular. It was then suggested in THE LANCET of March 5th that another meeting should be held before the College lecture on the 7th. On the latter day the College authorities endeavoured to prevent the meeting by keeping the doors of the theatre closed till the last moment; but the Members were not to be so easily baulked, and proceeded to their business under the chairmanship of Mr. G. WALKER, regardless of the College officials. A requisition was hurriedly prepared and presented, in the form of a placard, by the Secretary of the College, in the following terms:—"The President and Council require the Members and students to quit the theatre." This was disregarded, and meanwhile the authorities perpetrated the monstrous insult of sending the "Bow-street runners" to arrest Mr. WAKLEY, who was taking a prominent part in the proceedings. A general uproar ensued, amidst which Mr. WAKLEY was brutally and violently dragged into the street. The charge and counter-charge were both dismissed by the Bow-street magistrates, and a criminal information applied for by the College authorities against those who had taken part in the proceedings in the College theatre led to no result except to widen the breach between the College and its Members, and to the enacting of the bye-laws to *prevent* meetings within the College. For forty years these bye-laws were deemed sufficient to prevent all meetings; but fourteen years ago they were found to be sufficiently elastic to *permit* what they were originally designed to prevent. The right to hold meetings was hardly won, and reluctantly conceded. It does, however, exist, and no more fitting or urgent occasion for exercising that right can exist than the consideration of the proposed alteration of Charters.

THE paper which Surgeon-General HUNTER read before the Epidemiological Society on the 9th inst., and of which we gave a summary in our last issue, embodied the conclusions at which he had arrived as to the cause of the epidemic of cholera in Egypt in 1883, and it evidently to a great extent anticipated the official report which he has made to the Foreign Office. Dr. HUNTER has no hesitation in asserting that cholera is not a contagious disease, and he entirely disbelieves in the existence of anything that can be called a specific cholera germ. These views not only gave a strong tinge to all he had to say about causation, but they appeared also to have had a marked influence on the character of the investigation which he carried out. Indeed, after dealing with the question of importation simply to show that under the circumstances which existed in Egypt no such source of origin can be entertained, he stated that, being one of those who do not believe in the contagiousness of cholera, and who therefore do not look for a specific entity or germ, or for its importation into a country, in order to account for the development and the spread of the disease, he had turned his attention to the country itself in his search for a cause of the epidemic outbreak. This sentence, which we have reproduced as accurately as is possible in the case of an address which cannot, as a matter of courtesy, be issued in its entirety until it has been submitted to Her Majesty's Government, will be regarded by many as embodying a confession that the inquiry was approached with a very strong bias adverse to the views which are very generally entertained in this country as to the etiology of cholera, and it will require a strong array of facts capable of standing the test of the closest criticism in order to remove this impression.

That portion of Dr. HUNTER'S paper which explained his views as to the origin of the epidemic is the one which for the moment is of the most prominent importance; and it went in the main to support the opinions which he has expressed in his second report to Earl GRANVILLE, and which were to the effect that cholera is endemic in Egypt; that groups of cases have occurred there from time to time since the last great outbreak in 1865; that cases of a disease which have been designated as choleriform, cholerine, cholera nostras, diarrhœa, &c., but which were in reality cholera itself, were unquestionably prevalent in the early

part of 1883; and hence that the attacks at Damietta in June last, instead of being the initial ones of the epidemic, were but a continuance of a pre-existing prevalence of the disease. But Dr. HUNTER'S paper was, owing both to the exceptional circumstances under which it was delivered, and because of its length, necessarily an incomplete one, and nothing but a summary of the circumstances on which his views are based could be referred to before the Epidemiological Society. The main body of facts is stated to be included in appendices, and these will have to be very carefully scanned before a final opinion can be given as to their value. We have become accustomed in this country to require as a basis for views as to the causation of an epidemic nothing short of a detailed account of such actual facts as have come under the notice of the investigators themselves, declining, as a rule, to accept anything on mere hearsay. The difficulties involved in conducting a large inquiry in a foreign and disturbed country may lead us not to expect so much in this instance, but we hope that the limited time which Dr. HUNTER was able to give to his inquiry will not have prevented him from having personally collected at least a substantial amount of information of the sort that will be looked for. His statements that some two hundred cases of a disease having intimate relation with cholera occurred early in 1883 at Zagazig, and that fatal attacks of a similar disease were so numerous in other places that the ordinary funeral rites had to be suspended, are of the utmost importance in connexion with the views he has expressed. But we have yet to learn what was the source from which the information as to them was received. Should they turn out to be above suspicion, they must be regarded as going far to show that cholera had been prevalent in Egypt long before June last, even if they do not suffice to prove the existence of a somewhat continuous series of attacks during the eighteen years which have elapsed since the last epidemic.

At the same time it must be confessed that if such cases have really occurred, they will be regarded by those who attribute cholera to a specific germ as constituting the several links in that long chain of cases which, for the support of their views, it is so essential to establish in order to connect each case with an antecedent one. Dr. HUNTER, it is true, thinks more of the influence of certain special meteorological conditions which obtained at the time of the outbreak in a country where filth reigned supreme than of any continuity of previous attacks. But by those who assume cholera to be very nearly related to enteric fever in its method of causation, the existence of those previous attacks and of conditions of filth and disease which may be held to be favourable to the development of the specific organism with which they were associated, will be regarded as materially supporting views which are adverse to those with which Dr. HUNTER has identified himself. So much depends, however, on the nature of the evidence which will be adduced in the official report that any comments we can make on the etiological aspect of the subject must necessarily be regarded as only provisional.

THE very frequent occurrence of so-called displacements of the uterus — especially anteversion and anteflexion, retroversion and retroflexion,—and the numerous symptoms attributed to these conditions, and especially the part the weight of the uterus is supposed to play in the production of these symptoms, give to the question, "What value is to be attached to the weight of the uterus in causing pelvic suffering?" an importance which makes it incumbent upon every physician and everyone practising gynæcology to become thoroughly acquainted with the evidence bearing on a question of such magnitude. The sufferings said to arise from the weight of the displaced uterus, more especially of the displaced fundus, are many and various; they are, moreover, of a most intolerable character. In anterior displacements, sterility and dysmenorrhœa are said to be caused by pressure of the cervix against the posterior wall of the vagina. The bladder suffers especially; it becomes irritable and enters on a state bordering on inflammation, whatever that may mean. Occasionally there is retention of urine, while the rectum becomes painful and irritable. Posterior displacements again render defecation difficult, by obstructing the rectum until the stools become flattened or ribbon-like, and cause pressure on the sacral plexus and on neighbouring organs. These are very painful and troublesome symptoms, and in their further consequences very serious. In the consideration of the subject, the first question that suggests itself at the outset of the inquiry is, "What weight does this ponderous organ show when placed in the scales?" On turning to Dr. ARTHUR FARRE, we find the actual weight of the offender to be from nine to twelve drachms. This is the weight of the adult virgin uterus. The weight of the uterus which has borne may be a little more. This is the weight of the organ when taken out of the body and deprived of all its natural supports. The weight of it when in the pelvis between the folds of the broad ligaments must be considerably less. Suppose, however, it is nine to twelve drachms; then comes the question, "In what position of the uterus does this weight bear on the most limited area, and what is that area?" For in that position and on that area will the organ exercise the greatest pressure. The apex of the cervix measures, according to Dr. FARRE, seven to eight lines by five, or about half an inch square. The fundus is considerably larger—probably an inch square,—while the anterior and posterior surfaces are each about three inches square. Now, it is clear that if the organ lie on its anterior or posterior surface, the weight on each half inch square will be one and a half to two drachms; if on the fundus, four and a half to six drachms, and if on its cervix, nine to twelve drachms.

The organ rarely, perhaps never, rests on its fundus. On the other hand, many authorities, especially those who regard versions and flexions of the uterus as causes of severe suffering, much of which is supposed to be due to the weight of the uterus pressing on the bladder and rectum, assert the normal position of the organ in the pelvis to be represented by a line drawn from the centre of the pelvic brim to the tip of the coccyx—that is, one in which the cervix is undermost, and therefore the whole weight of the organ is thrown on the cervix, and consequently on a small area in the anterior wall of the lower third of the rectum, especially when the woman is in the recumbent position; and if the weight of the uterus be such an important factor in causing pelvic trouble, the normal position of the organ with the woman in the recumbent position is the most favourable for the production of the

symptoms due to its weight. On the other hand, in versions and flexions the weight of the organ is distributed over the whole or the greater part of the anterior or posterior surface, and can amount at most to about two drachms only to the half-inch square—that is, in the so-called displacements the organ is placed in the most unfavourable position for causing symptoms by its weight. In the living body, however, the pressure weight of the organ must be much less than its dead weight when placed in the scales, and when distributed over either of the surfaces it becomes too trivial to give rise to the slightest suffering. For these conclusions there is abundant evidence, besides the fact that versions and flexions are of very frequent occurrence in women who present no pressure symptom of any kind. During early pregnancy the uterus may be and very often is acutely anteflexed, and gives rise to no pressure symptom in the bladder or the rectum; it may also be acutely retroflexed without giving rise to pressure symptoms until it fills the pelvis and fails to rise into the pelvic brim. It is not uncommonly twice its normal weight in consequence of subinvolution, or it may be the seat of a fibroid tumour as large as an orange (still remaining in the pelvis) and cause no pressure symptom. Indeed, the weight of the unimpregnated uterus cannot be regarded as of the slightest importance in the production of pelvic troubles, for the organ is only the passive conductor of the intra-abdominal pressure, and be it straight or bent, verted or flexed, it is no more active in causing distress by its weight than a coil of intestine three inches in length filled with fæces.

IN No. 18 of the *Archives de Neurologie* Drs. CHARCOT and FÉRÉ have published an account of five cases of locomotor ataxia in which trophic lesions of the foot were observed. Three of these occurred in their own practice. The fourth was shown by Mr. H. PAGE at the International Medical Congress, as recorded in the Transactions of the meeting (tom. i., p. 124). The fifth was that of a patient who died in the Hôtel Dieu. The autopsy was performed by Dr. CAPITAN, who sent the bones of the right foot to Drs. CHARCOT and FÉRÉ for their inspection. This is the first instance in which the exact pathological condition of pedal tabetic arthropathy has been determined.

It may be interesting to our readers if we give a *résumé* of the signs and symptoms observed during life by Drs. CHARCOT and FÉRÉ in their three cases.

The first case was that of a male aged forty-one; duration of tabes twelve years; no mention of syphilis; muscular incoördination; abolition of patellar reflex; difficult micturition; laryngeal crises; lightning pains in lower limbs; anæsthesia; contracted equal pupils; diplopia. The affection showed itself as a roundish swelling over the scaphoid, and internal cuneiform bones, and over the first tarso-metatarsal joint of both feet. It was perfectly symmetrical on the two sides. The parts were slightly painful. There was no crepitus. The patient attributed the local trouble to a sprain.

The second case was that of a female aged twenty-two. Tabes of four years' duration; no history of syphilis; muscular incoördination; loss of patellar reflex; retention of urine; lightning pains in face and limbs; dilatation of right pupil; Argyll-Robertson phenomenon. Darting pains had been experienced over the tarso-metatarsal articulations of both feet. The joint between the internal cuneiform and the great toe on each side was much swollen, but there was no crepitus.

The third case was that of a female aged thirty-six. She had suffered from syphilis. An uncle and aunt were insane. Visual troubles had been complained of for eight years. The other symptoms were apparently precipitated by a fright four years after the onset of the former. There were present: muscular incoördination; Westphal's sign; incontinence of urine; lightning pains in legs; a sense of constriction of chest; areas of anæsthesia varying in situation and intensity; contracted pupils; Argyll-Robertson phenomenon, and slight drooping of eyelids; also periods of mental depression. The right foot was considerably deformed. All the bones of the tarsus seemed to participate in the swelling, which was most noticeable in the region of the tarso-metatarsal articulations. The nutrition and growth of the nails of both feet were perverted. The knees were the seat of well-marked ataxic arthropathy. The skin and subcutaneous cellular tissue of the upper limbs were greatly thickened, bearing a striking resemblance to what is seen in elephantiasis.

In Dr. CAPITAN'S case the skeleton of the foot presented advanced morbid changes, which in the main consisted of irregularly disposed erosions, minute osteophytic deposits, and fractures. In all, twenty-five fragments were found detached from the principal bones. The first and second metatarsal bones were united by osseous anchylosis to the first and second cuneiform bones respectively.

Drs. CHARCOT and FÉRÉ draw attention to the absence of injury and suppuration and to the presence of tabetic symptoms as important diagnostic data, to which we may add the freedom from tensive pain and other marked signs of inflammation, save swelling, as well as the usual want of crepitus. Their second case is noteworthy on account of the youthful age of the patient, but, as our authors observe, "Maintes fois déjà nous avons fait la remarque que, chez la femme, les premiers symptômes de l'affection tabétique se manifestent souvent de très bonne heure." Mr. PEPPER, in his work on Surgical Pathology, p. 127, relates an example of the disease under consideration which closely resembles those described above.

Annotations.

"Ne quid nimis."

UNIVERSITY OF CAMBRIDGE.

THE Rev. Dr. Porter, Master of Peterhouse, in vacating the office of Vice-Chancellor which he held for more than two years, delivered, as is usual on such occasions, an address to the Senate, and spoke of the great changes that had taken place in consequence of the New Statutes coming into operation, which he admitted had infused fresh life and vigour into every department of study in the university. Referring to changes of importance that had taken place during the past year in the Professoriate of the University, he said:—"Dr. Humphry, after many years of distinguished services as professor of anatomy, during which he has had the gratification of witnessing the steady growth in numbers and reputation of the Cambridge Medical School, has resigned that chair. Fortunately, however, by his election to the Chair of Surgery, he will be able to render in the future

as Professor of Surgery not less eminent services to the University and the Medical School than he has rendered in the past. With characteristic generosity he has accepted an office to which at present no stipend is attached. The great services which Dr. Michael Foster has rendered to the university for some years past as a teacher of physiology by his capacity for original research, his rare powers of exposition, and of exciting enthusiasm for scientific investigation among his pupils, have been fitly recognised by his appointment at the earliest opportunity as the first professor of physiology. The University must be warmly congratulated upon numbering such an eminent man among her professors. In Dr. Macalister, who was elected on the same day professor of anatomy, the University welcomes a distinguished man of science, and an accomplished Egyptologist, from the sister University of Dublin."

HOSPITAL ACCOMMODATION FOR NORTH LONDON.

THE meeting to be held to-day (Saturday) in the Highbury Athenæum takes place under very distinguished auspices of rank and wealth. His Grace the Duke of Westminster will preside. The first resolution will be moved by the Marquis of Salisbury, K.G., and seconded by Lord George Hamilton. It will aver the want of additional accommodation in North London, and warmly approve the arranged amalgamation of the Great Northern Hospital and the Central Hospital for North London as being the best means of providing for that necessity. Earl Cowper, the Lord Mayor, Mr. Burdett Coutts, and others will speak to other resolutions. Provision will be made in the second resolution for pay wards or a pay wing. We gather that the subscriptions promised, including £4000 from the Great Northern, amount only to £10,000. Considering the time this scheme has been before the public and the names on the subscription list we confess to disappointment. And we remind the distinguished patrons and the public of the north of London that hospital building and maintenance are more serious matters than these subscriptions seem to imply, and that unless they are pitched to a higher note of liberality we shall only add one more embarrassed institution to the hospitals of London.

THE HEALTH OF NICE.

THE Exhibition at Nice was opened before the principal objects to be exhibited had been taken out of their packing-cases, but by this time order reigns on the slopes of St. Etienne, and visitors are flocking from all parts of the world to the banks of the Paillon. Rumours concerning the prevalence of typhoid fever in the metropolis of the Riviera have had, however, a deterrent effect, and Mr. Harris, the British Vice-Consul, writes to *The Times* complaining that these statements have kept people away. The evidence on the point is somewhat contradictory, but it seems tolerably clear that whatever cause for anxiety there may have been during the summer months, the disease has not spread to the better quarters of the town, nor attacked the English visitors. In a badly drained town, where the most elementary laws of hygiene are ignored, where there is a dense, ignorant and poor population, living in a congeries of streets that are barely three yards wide, though the houses are six storeys high, zymotic disease must prevail to a large extent, and the death-rate has always been exceptionally high. Now, however, that public attention has been awakened to the importance of good sanitation, cases of typhoid fever, which a few years ago would have scarcely been noticed, are made the subject of angry comment. For our part, we have no reason to believe that Nice is in a more unfavourable condition this winter than during previous seasons. On the contrary, the new and excellent water-supply, which was placed at the disposal of the inhabitants the first day of this year, offers an extra security and advantage. Still all persons wintering on the Riviera reside in towns where the death-rate is much higher than that of London, and to obtain the benefits of a superior climate, they must be ready to incur the risk of inferior and, in fact, very defective sanitation.

THE CLERGY AS "JUSTICES" IN CASES OF LUNACY.

LORD DIMSDALE recently urged a timely protest against one form of "easy" admission to public asylums for the insane. It would appear that patients are, occasionally at least, admitted to the Three Counties Lunatic Asylum on the order of the chaplain of the workhouse, acting as substitute for a justice. We doubt whether the proceeding is legal, as the justices suppose it to be. A clergyman may act in the absence of a justice of the peace, but it was never intended that the chaplain of a workhouse, who is not necessarily a beneficed clergyman, should over-ride the decision of a justice by endorsing the single medical certificate given in such a case. We are of opinion that Lord Dimsdale was not only quite right, but has done good service in bringing the matter under the notice of his fellow justices. So far from increased facilities being needed for the removal of troublesome or eccentric paupers to asylums, greater precautions against wrongful or needless removal are required. If the chaplain of a workhouse may countersign the order and single medical certificate in a case of this class, some three workhouse officials combining may do just as they like with the inmates of workhouses. This new terror added to the "test" will doubtless tell against pauperism and help to keep down the expenses! Another danger—viz., failure to obtain removal to an asylum of cases proper for admission—must necessarily exist as long as the clergy retain their present powers. This was illustrated by the evidence given on the 9th inst. at an inquest at Carshalton on the body of a man who committed suicide whilst in a fit of temporary insanity. For the last three or four years he had been subject to delusions, and his conduct had lately become so alarming that a certificate of insanity was signed with a view of having him removed to a lunatic asylum. The rector of the parish, however, refused to countersign the certificate, and it consequently could not be acted upon. Shortly afterwards, on the 5th inst., the man was found to have wounded his left arm, no doubt in an attempt to open a vein, and to have completed his work of self-destruction by hanging himself. We cannot but feel that, with the protective discipline and safeguards of asylum life, this man might have now been living, and we trust that the lesson taught by this painful episode will not be unheeded by those concerned.

ANOTHER TYPHOID EPIDEMIC FROM MILK.

WERE it not with the hope that continual iteration may be useful in exposing the enormity of the evil, and in showing to the public the importance of increased power in regulating the sanitary state of dairies, the frequent occurrence of epidemics due to polluted milk would be scarcely worth recording. We can hardly look over a morning newspaper, much less any of our medical or sanitary journals, without discovering that disease and death have been disseminated through the milk-can, and a compilation of cases for a year proves that the total number of victims is very large. It is scarcely possible that the only men who know nothing of milk-pollution by means of disease-germs and dirty water can be men engaged in the trade; and wilful exposure of milk to the dreadful risk should be met by punishment of the severest kind. We

have now to record an outbreak of typhoid fever at Aberdeen, exactly similar to those which so recently occurred in the neighbouring districts of Dundee and Strichen. Since the 20th of December sixteen cases of typhoid fever have occurred among nine families in one of the best districts of Aberdeen. The houses were found to be peculiarly free from sanitary defects, and Dr. Simpson, the medical officer of health, had little difficulty in connecting the cases with the dairy from which every one of these families derived their milk-supply. The sale of milk and manufacture of butter have been stopped, and the stable is being locked when the steeds are gone. Dr. Simpson and his staff have shown their wonted zeal in minimising the mischief. As of medical interest, it may be mentioned that several of the cases have painful swellings of the parotid and cervical glands as prominent symptoms, and among the aged the leading features are those of blood-poisoning.

DEATH-RATE OF NEWCASTLE-UPON-TYNE.

A CONSIDERABLE rise in the mortality of Newcastle-upon-Tyne during the third quarter of 1883 has led to the issue by Mr. Armstrong, medical officer of health, of a carefully prepared report on the causes of death prevailing in that city. The general mortality for the quarter in question was at the rate of 27·0 per 1000, as compared with 24·4 in the corresponding quarter of 1882, and the difference means an increase of 107 deaths. Small-pox and diarrhœa, which so often tend to exceptional mortalities—the latter disease especially so in the autumn months—are in no way responsible for the increase, both diseases exhibiting a decreased death-rate. The bulk of the mortality has, however, fallen upon children, and Newcastle now stands so low down as twenty-fourth in the twenty-seven large towns as regards deaths under one year. Pneumonia and scarlet fever have largely contributed to the fatality. The facts as regards pneumonia are somewhat striking. It was certainly not due to any special coldness of season, and hence Mr. Armstrong inclines to the view that the disease has probably been of a zymotic character, induced by defective local sanitary circumstances, and resembling that specific pneumonia of which much has been written in recent years. His view as to this is strongly borne out by his statement that it is in the "fever dens" of the city that the so-called non-infectious causes of death have been most operative. Hitherto the pneumonia recorded as having been of a zymotic character has generally attacked adults, and hence it becomes important to ascertain as the result of further investigation how far "infectious pneumonia" is a cause of infant mortality. As regards the spread of fever in the city, Mr. Armstrong's report shows clearly how by the existence of "fever dens" the sanitary welfare of the whole population is endangered. From these dens, he points out, come the charwomen, errand boys, newspaper vendors, seekers after dispensary letters, mendicants, &c., and yet when the families of the wealthy are stricken with fever in some unaccountable way, this source of danger is rarely thought of. In this way the responsibility of leaving the strongholds of infection alone is forcibly brought home to the well-to-do. Mr. Armstrong is no believer in the "wave theory" of infection, and he does not regard the constant recurrence of epidemics at certain seasons as any greater argument in its favour than is the ripening of fruit or the production of an abundant harvest at a particular time of the year. Temperature, moisture, and other meteorological conditions, he states, are to "germs" precisely what they are to the grain of the agriculturist. The farmer knows that his prospect of harvest depends on the season, but he also knows that, whatever the season, he will have no crops unless the seed be sown. Mr. Armstrong has shown by his previous reports the value which he attaches to a full knowledge of meteorology in connexion with epidemic disease, but he is also convinced that he has, in the prevalence of fever mortality, to do with a specific germ, the vitality and power for propagation of which must be checked. He endeavours to put this view before the population of his district in simple language, and he has succeeded in compiling a report which will be of great utility to the public as well as to the sanitary authority. A well-chosen simile is that in which he shows the important distinction between agricultural and morbific seeds under the influence of light. The former thrives in the sunshine, to the latter it is death. Light is one of the most powerful deterrents of dirt, it neces sarily exposes it to view, and on this account alone its influence in and about the dwellings of the poor is of the utmost importance.

SLAUGHTER-HOUSES AND ABATTOIRS.

IN the same report as that above referred to Mr. Armstrong strongly condemns the abominable state of the private slaughter-houses in Newcastle, and advocates the erection of public abattoirs outside the city. The advantages, both sanitary and economic, of the latter system, to which he refers, will be of general interest in connexion with a question which is fortunately receiving increased attention year by year. The sanitary advantages of an abattoir are stated to be: (1st) Removal of nuisance from dwellings; (2nd) exclusion of putrefiable matter from sewers; (3rd) protection of meat from liability to exposure to foul emanations; and (4th) limit to the traffic in diseased meat. The economic advantages are: (1st) The meat is less liable to "spoil"; (2) the blood and offal are saved (the blood of an ox is worth about 4s.); (3rd) saving to the public from order, proper division of labour, avoidance of transportation, and the doing of business on a large scale; (4th) abattoirs yield a fair profit, that at Bradford is said to pay 6 per cent., and that at Birkenhead 5 per cent.; and (5th) the ground now covered by private slaughter-houses and their surroundings will increase in value.

THE INHERITANCE OF TUBERCULOSIS.

THE question of the inheritance of tubercular disease is one which is capable of wide application. The fact of such inheritance is undoubted, but the manner of it is still a moot point. Unlike syphilis, there are, we believe, no instances on record of congenital tuberculosis—i.e., of the actual transmission of the disease from parent to offspring before birth—and the cases of tubercular disease manifesting itself in very early infancy are but few. Hence it has been plausibly maintained that what is inherited in tuberculosis is not the actual disease itself; there is no transmission, it is held, of the tubercle-virus, but only of a tendency or disposition which renders the offspring of tubercular parents more prone to the disease when placed under conditions favouring its development. Some experiments described by Landouzy and Martin in the December number of the *Revue de Médecine* tend to disprove the ordinarily received notion, and to favour the idea of the actual transmission of tuberculosis as of syphilis. Their plan was to employ for inoculation experiments, under precautions to avoid contamination, portions of a tuberculous lung from a pregnant woman (five months), of the placenta, which appeared healthy, and of the blood and tissues of the fœtus. The inoculations were made on the guinea-pig, and tuberculosis was excited in the animal. This disease was again transmitted to another guinea-pig by inoculation. Should such researches be verified they would justify the assertion of those observers that the fœtus may inherit the actual disease from the mother. But it is also a fact that tuberculosis is inherited on the paternal side; and accordingly they tested this ex-

perimentally by inoculating guinea-pigs with portions of the apparently healthy testicle and semen from a tuberculous guinea-pig, also with a positive result. Without denying that a tendency or peculiar disposition of tissues to become tuberculous is an important fact in the inherited taint, Landouzy and Martin find sufficient warrant for the belief that there is an actual transmission of the virus also. The inheritance of tuberculosis may, they say, be like the inheritance of fortunes. The children of wealthy parents inherit their riches; other children inherit the means whereby they may become rich in after-life. Some children are born tuberculous, others are born with the capacity of becoming tubercular; the former inherit the grain itself, the others only the soil, which sooner or later favours the growth of the tuberculous seed that by chance is implanted in it.

KNEE-BREECHES FOR LABOURERS.

FASHION, notwithstanding its caprices, is subject to the controlling influences of the sense of comfort and that of appearance. We may say that of these the former influence, on the whole, predominates in the dress customs of the male, and the latter in those of the female sex. On this hypothesis one can understand how a desire for warmth, developing with the growth of civilisation, has led our countrymen, or most of them, as well as our Continental neighbours, to abandon various cooler and lighter, and even more wholesome, modes of covering the nether extremities, for that of our own day, which is probably as inelegant, and sometimes as inconvenient, as it is protective. We have left behind us the British kilt, the Saxon leg-swathing, the thigh-breeches the knee-breeches, and have put on trousers. Ours is the century of long clothes. It may be questioned whether we have gained much by the change. Some, indeed, of our ancestral garments may, by this time, be too long out of date to be recoverable. The kilt and leg-bandage, for example, are separated from us, not only by centuries of disuse, but by differences of sentiment and occupation between our time and theirs, which must render their revival in any general sense well nigh impossible. The Elizabethan costume is in the same position; but the short clothes of the Georgian era still hold an established place among varieties of dress, though not that of the governing type. They seem to form the chosen habit of those whose lives abound in muscular movement. Thus they set the fashion of boyhood in the knickerbocker suit; they commend themselves to athletes, and especially to those of them who run much; farm-labourers often wear them; the infantry soldiers of more than one Great Power find them serviceable. Might they not be even more commonly worn in civil life than they are? We think so; and though we cannot here follow all the intricacies of an argument as to whether or not knee-breeches are on the whole more seemly and convenient than trousers, whether the use of the latter should not be conceded to the man of unshapely limbs, and so forth; still, it seems to us that in certain conditions at all events the elder costume might be adopted with advantage. Speaking broadly, we may say that all callings which entail much physical exertion would profit by the change. In particular, this is true of labour in the open air. In this form of work especially, where there is frequent and prolonged movement of joint and muscle, the weight of surplus clothing soon occasions weariness, and the surroundings are not the most cleanly. The labourer if knee-breeched and gaitered would be disencumbered of as much heavy mole-skin or corduroy as would otherwise fall below the knee, a part of his clothing would not then as now flap about the feet to no good purpose, but to be soiled by the mire of his work, or in wet and cold weather to lead to illness by chilling or freezing on his legs. Gaiters of some close and not too heavy material might be worn over the stockings. They would be comparatively out of the way of dirt, would maintain warmth, would brace the muscles by equal and moderate pressure (a noteworthy consideration with men who are much on their feet), and if wetted might be easily removed and replaced by another pair. If some such reversion to a prior type were brought about in the dress of workmen, the change, being one of arrangement even more than of quantity of clothing, would enhance the comfort, facility, and effect of their exertions without prejudice to their health. It is at least suggestive that many workmen do endeavour by various devices, such as leggings, straw ropes, and the like, to make as little of their trousers below the knee as possible.

CLINICAL SOCIETY OF LONDON.

THE annual general meeting of the Clinical Society of London was held on Friday, Jan. 11th. Mr. Warrington Haward read the report of the council, which showed the Society to be in a very flourishing condition. Twenty-one new members had been elected during the past year. The treasurer, Mr. Heath, announced that the result of the financial year was to leave a balance in hand of over £160, and that the Council had therefore determined to invest £50 of this amount, making the amount of Consols held by the Society £600. He referred to the great value of the services rendered by Mr. Wheatley to the Society and to himself as treasurer. The usual resolutions, adopting these reports and thanking the retiring vice-presidents and members of council for their services, were moved and carried. Mr. Berkeley Hill proposed a vote of thanks to Mr. Warrington Haward for his very efficient services as secretary; this was seconded by Dr. F. Taylor, and carried with acclamation. Mr. Haward, in acknowledging the vote, referred to the advantage he had derived from being the colleague of Dr. Taylor and Dr. Coupland; and said that he had been amply repaid for all his services by the interest and instruction he had derived from the meetings of the Society. He spoke of the sorrow with which he had heard of Mr. Wheatley's death, and of the kind and courteous help which he had always received from him. The following gentlemen were declared by the scrutineers to be duly elected to fill the various offices of the Society for the ensuing year:—President: Sir Andrew Clark, Bart. Vice-Presidents: Drs. J. W. Ogle, Pavy, and Reginald Southey, Messrs. Croft, Durham, and Morrant Baker. Treasurer: Mr. Christopher Heath. Council: Drs. Radcliffe Crocker, Arthur W. Edis, William Ewart, Robert Liveing, R. J. Lee, Stephen Mackenzie, Mahomed, Miller Ord, Gilbart Smith, Frederick Taylor, Messrs. A. E. J. Barker, Clinton T. Dent, Warrington Haward, Clement Lucas, J. H. Morgan, Henry Morris, Herbert W. Page, R. W. Parker, Gifford Ransford, and W. J. Walsham. Honorary Secretaries: Dr. Sidney Coupland and Mr. Rickman Godlee.

CREMATION.

ATTENTION has again been drawn to the practice of cremating, and somewhat forcibly, by an incident with respect to which we wish to have nothing to say. The case to which we allude is in some of its features so extraordinary that any mere remark must be inadequate. As to cremation, we have our doubts, and they are very grave, with regard to the possibility of carrying out such regulations as would be indispensable to the safety of the public if the practice of destroying the bodies of deceased persons soon after death were allowed. In France the experiment is to be tried on the bodies of persons dying in hospitals. This is, so far as it goes, a fairly safe venture. England may very well await the results of the French experiment; and, meanwhile, the law must be obeyed.

SANITARY CONDITION OF CAMBRIDGE.

IT is like perusing ancient history to read that, in consequence of the numerous complaints made by inhabitants of Cambridge as to the neglect of the sanitary condition of the town by the Commissioners, the Local Government Board is about to hold an inquiry. In 1874 there was a similar outcry, and then great things were to be done, among which the diversion of the sewage from the Cam was considered a matter of immediate necessity, and schemes were prepared showing the ease with which it might be effected. However, for some reason or other, the Local Government Board failed to press its demands, and since then sanitary matters have remained much *in statu quo*. Whoever has visited Cambridge must be fully aware how urgently an adequate scheme of drainage is required. Owing to the level on which it is built, the flow through the main sewers is sluggish, whilst those constructed when the town was much smaller are now overcharged with the drainage from numerous new suburbs, to say nothing of their state of decay and disrepair. Were it not that Cambridge is exceptionally fortunate in having secured an excellent water-supply, and being provided with many open spaces, which secure an ample diffusion of the sewer gases into the general atmosphere, instead of penning them up, the ill-effects of the present drainage system would ere this have been felt more severely. Still the great mortality that attended the outbreak of typhoid fever at one of the colleges in 1874 shows that epidemic disease when introduced is likely to be intensified. The same difficulties existed at Oxford, but they have been resolutely met; an excellent system of drainage has been initiated, and a good supply of potable water secured. Cambridge ought not to lag behind the sister university, and as she has a good water-supply to start with, her expenses would not be so great. Besides, the general features of the land about Cambridge are favourable to the disposal of sewage by irrigation.

HYGIENE OF IRISH NATIONAL SCHOOLS.

DR. CAMERON has done good work in drawing attention, in a paper read before the Congress of Teachers recently held at Dublin, to the insanitary condition of many of the Irish national schools, and which was lately referred to by our Dublin correspondent. This paper exhibits a state of things demanding attention and speedy amendment. From a report of the Commissioners of National Education in 1882, it appears that of 7302 schools no out-premises are attached to 1607; and in 577 instances where out-premises are provided their state is pronounced as "bad." At one school, superior to many others in the same part of Ireland, Dr. Cameron found that when it was full each pupil had 4·63 square feet to move in, and 33·77 cubic feet to breathe in! He also found the arrangements for ventilation, lighting and heating generally bad and inadequate. With regard to the sanitary accommodation, Dr. Cameron states that no less than 1704 schools are without privies. The children in these schools have either to seek refuge behind the nearest hedge, or, even more publicly, on the roadside. The condition of the teachers is hardly less deplorable than that of the scholars. Of the 12,296 national teachers the average remuneration, it appears, is only £57 9*s*. A bricklayer's wages, Dr. Cameron observes, amount to more than this sum, while a plumber can earn double. With respect to residences, many teachers have no official residence that can be properly so called. A teacher in the county Clare thus describes his condition:—"I rent, he says, one cold, damp room, about eight feet square, for which I pay £3 a year. In this I sleep and take my meals, and do whatever reading and writing I can; there is not even a fireplace in it." The female teacher at this school has to travel six miles daily over a bleak and desolate mountain path to and from her home and the school. In the cases where tenements are provided they are generally too small and defective in accommodation. Thus, for instance: "A room thirteen feet by eleven feet, having a clay floor; a second apartment fourteen by seven feet, used as a bedroom and kitchen"; this tenement holds nine persons, and is exposed to floods. Here is another picture of a "free residence," containing one apartment fifteen by twelve feet, floor of clay; one-fourth of the roof was stripped off during the gale last October, and has not been repaired; the walls are eight feet high, and there is neither plaster nor ceiling of any kind in the apartment. In bringing this matter forward, Dr. Cameron deserves the thanks of all interested in the welfare of Ireland. It is impossible for a country to progress under such conditions of national education as, he points out, generally obtain. The school ought to be the place where the first lessons of decency, order, and cleanliness are taught; but how can this be the case when the schoolhouse vies with the cabin and the hut in squalor, dilapidation, filth, and in the absence of the most primitive sanitary accommodation?

THE LATE MR. B. R. WHEATLEY.

THE sadly unexpected death of Mr. B. R. Wheatley, the Resident Librarian of the Royal Medical and Chirurgical Society, which occurred on the 9th inst., after a few hours' illness, has removed from the scientific medical world of London one of its most widely known and respected officials, and has created a vacancy which it will be no easy matter to fill. Mr. Wheatley possessed exceptional and peculiar gifts for the post he had occupied for nearly thirty years, and no one held a more respected position in the much-valued circle of librarians. His soul was in his work; he loved it and the Society which reposed its confidence in him. And he was worthy of that confidence, for he was an upright, honourable man, whose special learning, genial temper, ready willingness, and faithful discharge of duty, added to his methodical and punctual habits, rendered him the ideal of what a librarian should be. During his tenure of office he has compiled and published more than one catalogue of the Society's library, the latest edition, which appeared in three volumes a few years ago, being a model of its kind. Such work will remain as a permanent memorial of the man, whose familiar presence will be missed by all who attend the various Societies which meet every week in Berners-street, and especially by those physicians and surgeons who freely availed themselves of his services in the prosecution of their literary labours.

MYSTERIOUS DEATH OF A SOUTHPORT MEDICAL MAN.

ON Wednesday, Jan. 9th, an adjourned inquest was held at Llanbadarn Fawr, near Aberystwith, on the body of the late Mr. John Edward Mathias, F.R.C.S., aged sixty-nine years. It appears that Mr. Mathias was seen by Mr. Gilbertson of Aberystwith, who diagnosed pneumonia and prescribed a mixture containing five minim doses of laudanum. The exact amount taken is not given in the report; probably it was three doses, equivalent in all to fifteen drops of laudanum. Symptoms of coma supervened in the evening, which ended in death the following morning. It is quite clear that the deceased had not administered the opium himself, and that the prescription was correctly written. The issue, then, lay between a mistake on the part of the dispenser and the addition of more opium after it left the chemist's. It was noticed that the colour of the first bottle of mixture was much darker than that of a second made up for comparison from the original prescription and by the same chemist.

The post-mortem examination revealed inflammation of the lungs. The jury returned a verdict that death arose from natural causes. As an analysis of the contents of the stomach, the remainder of the mixture, and some brandy taken from the room of the deceased, was ordered by the coroner, we conclude, in the absence from the report in a local paper of the results of such analysis, that death was due to asthenic pneumonia, in a person advanced in life, and that possibly the medicinal dose contributed somewhat to the result on account of some individual idiosyncrasy.

THE NEW PRINCE'S THEATRE.

THIS elegant structure was opened for inspection to a large number of the theatrical profession and general public on Thursday last. Admission was obtained by special invitation. It is not within our province to give a detailed description of the building, which is fitted up with every appropriate device that science could suggest and art execute, but we wish to draw attention to a few of the more important points that tend to the convenience and safety of frequenters of the drama. A noteworthy feature is the number of exits available in case of fire. Each floor has a double means of escape. The staircases are wide, and the steps conveniently shallow and broad. The stage can be shut off from the auditorium by an iron curtain, composed of two screens of wrought-iron plates one-eighth of an inch thick, forming a double division, with an air-passage between of six inches. This can be raised or lowered in thirty seconds by hydraulic rams; and the mechanism is so simple that a single movement of a lever is all that is required. Wherever it was found desirable the doors were made of sheet iron, by which an effectual bar is opposed against the passage of fire or smoke. The others work freely in either direction by American double spring and check action. The theatre is lighted with Swan's incandescent electric lights, the current being generated by a dynamo driven by a powerful gas engine, situated beneath the basement. The electricity is not delivered directly, but is stored up in fifty-seven Faure accumulators, each of two volts. There is in addition the ordinary supply of gas, and both this and the electric light are regulated by apparatus close to the prompter's box. The gas jets can be almost instantaneously flashed along five parallel battens placed over the top of the stage. The ventilation of the main body of the building "is by means of a central sunlight and a shaft over," while in the lower foyer and smoking room it is effected by the Æolus water spray. Each section of the theatre is supplied with waterclosets of an approved type.

THE KENNINGTON MURDER.

AT the Central Criminal Court, on Saturday last, George Baldwin, aged twenty-six, was found guilty of, and sentenced to death for, the wilful murder of George Hare. From a forensic point of view this is one of the most remarkable cases that have been tried in recent times, inasmuch as the deed in question appears to have been committed without any of the usual adequate incentives to the crime. According to the evidence, the convict owed his victim no grudge, being on the best of terms with him. He went upstairs avowedly to wish him "Good-night," and forthwith he cut his throat. The act can scarcely be considered as one of design, nor as committed by malice aforethought; and hence we maintain that the verdict of wilful murder was a logical fallacy. "Will is action under conscious motive"; but if ever there was a case of paralysis of the will, it was here. There is in many men an inward feeling, latent though it be, of the desire of destroying life. In most instances it does not rise to the surface in such a hideous form as to suggest the killing for killing's sake, especially of one's fellow-creatures; and when it does, it is in all but the rarest cases immediately repressed by a sense of moral and legal responsibility. We take it that in George Baldwin the balance between emotion and self-restraint was always in a state of unstable equilibrium, and that to this was added another agent of mental disturbance, intoxication; an agent that stimulates the passions and inhibits the will. It is absolutely necessary for the protection of society, that individuals like the one awaiting execution shall not be allowed at large, and moreover, it is a wholesome rule that drunkenness is not an extenuation of such an offence as murder. At the same time all the elements of a man's mental and moral stature should be taken into account in order to measure correctly the extent of his obligations and the degree of his guiltiness. We look upon this case as one of impulsive homicide, and of moral, if not legal, insanity. The Home Secretary will no doubt issue a commission to examine into and report on the past and present state of mind of the convict, and thereby obtain the information that ought to have been forthcoming at the trial. To hang the man under the existing unsatisfactory state of affairs would be trifling with justice.

PROFESSOR FLOWER.

BY Professor Flower's acceptance of the office of superintendent of the Natural History department at South Kensington, and his consequent retirement from the post of conservator of the Museum of the Royal College of Surgeons, the country has gained, and a corporation has lost, the services of an able scientist. Appointed in 1861, Professor Flower has for nearly a quarter of a century, by the zealous and even loving discharge of his duties, maintained the unrivalled anatomical collection in Lincoln's-inn in a state of the highest efficiency and renown; and it is earnestly to be hoped that the powers that be may be able to obtain as the next conservator one who will follow in the footsteps of him whose tenure of office is now drawing to a close. Professor Flower will be missed, not only by the Council of the College, but by the many visitors to the Museum, whose regard he has won by his admirable tact and never-failing desire to oblige, and who, while rejoicing at his promotion, will regret his absence from the duties of the office he has occupied so long.

NERVI NERVORUM.

WE understand that Mr. Victor Horsley has discovered sensory nerve-fibres and tactile end-bulbs in the epineural sheath of mixed nerves, and that he will demonstrate the specimens at the next meeting of the Royal Medical and Chirurgical Society on Tuesday, the 22nd inst. Nerve fibres supplying the bloodvessels in the sheaths of nerves have been described both by Sappey and Krause, but we believe that anatomical proof of the theory of true "nervi nervorum" advocated by Mr. Marshall in the Bradshawe Lecture has hitherto been wanting.

"INTEMPERANCE AMONGST WOMEN."

WE are heartily glad that our contemporary the *Queen* has had the courage to speak out on this point. Women *do* drink a great deal too much, and the "grocer's licence" affords them especial facilities for drifting into this most ruinous practice. Nothing but the selfish policy of certain great landlords who do not like to oppose the grocer's licence because a certain large class of their tenants claim to have a vested interest in these socially mischievous licences has stood in the way of a reform which is generally acknowledged to be necessary. Let the opposition offered by these houseowners be withdrawn. It is a discredit to their order. The grocer's licence is one of the most injurious of the per-

mits issued for the trade in intoxicating liquors. Women who would on no account be seen going into a public-house, and who could not obtain wine and spirits unknown to their husbands if they were only procurable through a wine merchant, now find it quite easy to supply their dressing-cases and wardrobes from the grocer's store. To sweep away this scandal and put an end to a secret vice the grocer's licence *must* be abolished.

THE LATE MR. J. ELLIOTT HOWARD, F.R.S.

THERE have been few more interesting events lately in the pharmaceutical world than the presentation to Mr. Howard in October of the Hanbury Medal of the Pharmaceutical Society. The modest and devout words of Mr. Howard, in reply, were significant of the true man of science and merit. It is sad to think that in so short a time we have to lament Mr. Howard's death. Much pressure on our space and time have prevented us from sooner adding our tribute of respect to this gentleman. There was no subject more worthy of the attention, even for a lifetime, of an observant man than the qualities of the different kinds of cinchona, and especially their richness in quinine and the best method of its manufacture. This was Mr. Howard's life work, and in the result he had no peer. For a time the French discoverers of quinine continued to manufacture the sulphate of quinine, not only for France, but for most continental countries. But for many years, in this country at least, the sulphate of quinine prepared by Mr. Howard has been preferred to all others. Some may imagine that this was due merely to want of competition, but this very want is only a confession of excellence, and a demonstration that rivalry was difficult, if not impossible. To have produced unrivalled sulphate of quinine was no mean achievement when we consider its uses in medicine throughout the world; and, as medical journalists, we record our admiration of pharmaceutical science and art as represented by Mr. Howard, who commanded not only the respect of men of science, but of his neighbours, among whom he was counted one of the best counsellors and advisers.

THE PULSE AFTER HANGING.

IN the Journal of the American Medical Association of Dec. 8th appears a letter from Dr. Blankenship detailing observations upon the pulse of a criminal during and after execution by hanging. After the rope was adjusted the pulse-rate was 121; immediately after the drop it fell to 54, 52, 39, 20, and to 0 in the fifth minute; but the sixth minute it rose to 70, then 73; eighth minute, 0; ninth, 34; after this no pulse was perceptible. The death was from strangulation, the neck not being dislocated. It is stated that the heart beat two or three times between the ninth and nineteenth minutes, and once during the nineteenth minute.

OPEN SPACES NEAR TOWNS.

ILKLEY MOOR is, it would seem, in danger of being taken from the population of the West Riding. The mania for "enclosure" is raging among that class of the people which finds its interest in making the towns encroach upon the country. Economists of the "commercial" type regard the growth of towns as evidence of prosperity. We are not sure that they are right. Fancy England one huge conglomeration of streets, and its whole atmosphere poisoned by smoky chimneys! Open spaces around or adjacent to towns, and readily accessible to their inhabitants, are necessities of health. We are heartily glad to see that the more sensible folk in the West Riding, and particularly in Leeds, are making a stout fight against the enclosure. We wish them success, and would gladly say or do anything to help them; but the facts of the "case" for open spaces are perfectly well known, and judgment has been passed by public opinion. What is needed is a determined opposition to all encroachments, and a sturdy resolve to secure the first necessary of public health—pure air, and plenty of it.

NO POISON IN THE BITE OF AN EPILEPTIC.

WE are accused of having overlooked the researches of M. Gautier when we asserted that there was nothing poisonous in the bite of a person in a fit. We did not either overlook or ignore the contribution to science made by the eminent investigator whose name has been mentioned. If a man be "rabid" either from excessive passion or disease there may be a morbid acridity in the secretion from his salivary glands, which is capable of producing toxic effects. The actual discoveries of M. Gautier have simply confirmed what would seem to be inevitable, looking to the operation of the law of development; but this is a totally different matter from that of which we were speaking. A "fit," popularly so called, is an epileptic convulsion, and there is nothing morbid in the excitement which the patient exhibits. There is neither rage nor rabies. The paroxysm is simply an explosion of nerve force, and it is important that the public should understand that not a vestige of danger attends the ministry of help in such cases. The bite of a bestial man in a paroxysm of rage may be as bad as that of an infuriated rat; but, as we have said, that is a different matter, and we would certainly advise that such persons should be kept at a safe distance.

PEABODY IMPROVED DWELLINGS.

AT the present time the good and useful work which is being steadily and automatically carried out by the Trustees of the Peabody Donation Fund is specially interesting. The mean number of persons residing during the quarter ending December last in the various blocks of Peabody Improved Dwellings situated in the various parts of the metropolis was 18,011. The numbers in the corresponding periods of the four preceding years were 9905, 9889, 11,459, and 14,604 respectively, showing a marked extension of operations during the three years 1881–83. The future effect of the rapidly extending operations of this Fund upon the housing of the industrious poor of good character in London can scarcely be overrated. While the "outcast poor" have still to be dealt with by other agencies, the buildings erected by the Peabody Trustees, and by the various associations and companies for improving the dwellings of the working classes, must be incalculably useful in reducing the congestion in the many still overcrowded districts of London.

REMOVAL OF A LEECH FROM THE LARYNX.

PROFESSOR RAMON DE LA SOTA Y LASTRA reports in the *Revista Médica de Sevilla* (November) the case of a man, aged sixty-four, who was admitted into the Policlinique of Seville on Aug. 3rd, 1883. Five days previously, while working in the fields, and sweating, he drank some cold water, and a few hours afterwards spat some blood. Swallowing and breathing became difficult, and sleep was disturbed by attacks of suffocation. Swallowing a leech is not an infrequent occurrence amongst drinkers at Andalusian streams; but the rapidity with which blood trickles from the mouth and the feeling in the throat usually point to the cause of mischief. It was not suspected in the present case, as some hours had elapsed before any blood appeared, and the patient had a family history of phthisis. After physical exploration of the chest the Professor made a laryngoscopic examination, which led to the detection of a leech within the glottis. Extraction of the anelide with a pair of laryngeal forceps gave immediate and complete relief.

THE DANGERS OF NERVE-STRETCHING.

IN a recent number of the *Charité Annalen*, Westphal reports the following case:—A man aged thirty-one, suffering from paralysis of the lower extremities, with spasmodic phenomena (startings of the limbs, exaggeration of deep and superficial reflexes, disturbance of sensation), was submitted to the operation of stretching the right crural nerve. Immediately after the operation a transient loss of the knee-jerk was noted, with stiffness of the muscles of the right limb. But incontinence of urine and stools with contracture of the flexor muscles and the appearance of a large slough at the site of the operation also appeared and endured. The patient succumbed three years afterwards. At the autopsy the brain, the pons, and the medulla oblongata were found to have islets of degeneration; the cervical and dorsal segments of the cord were the seat of a diffuse degeneration, which attained its maximum in the middle part of the dorsal region; finally, the right half of the lumbar enlargement was sown through with numerous foci of degeneration, which Westphal considered as in all probability produced by the laceration resulting from the stretching of the right sciatic nerve. The weight of the authority makes the case worth recording in regard to the possible dangers of nerve-stretching.

A WELL-MERITED TESTIMONIAL.

TESTIMONIALS are now plentiful as blackberries, but not many are so well-deserved as one presented on the 12th instant in the famous town of Perth. On that day several members of the Perthshire Medical Association, headed by Dr. Bramwell as president of that body, waited upon Dr. Alexander Baird, of Almond Bank, their late secretary, to present him in the name of the Association with a silver tea and coffee service, as a mark of their high esteem and admiration. The circumstances which called forth this expression of feeling were somewhat peculiar, and reflect great honour upon the recipient of the testimonial. For some time past Dr. Baird's health had been very infirm, yet such was his enthusiasm for the advancement of the profession to which he belongs that he did not allow his illness to jeopardise the prosperity of the Association of which he was secretary, but for three years conducted his official work from his sick bed. The presentation, which was subscribed for by members of the profession in all parts of the country, bore a highly eulogistic inscription. It may be remarked that this is the second testimonial received by Dr. Baird during his recent illness, the former one having taken the shape of a cheque representing a handsome sum.

AN ABERDEEN UNIVERSITY CLUB.

IT is proposed to form an Aberdeen University Club somewhat after the fashion of the Edinburgh University Club, which has now nearly reached its majority. A meeting has been summoned at the Inns of Court Hotel for Wednesday, the 23rd inst., at 5.30 P.M. Dr. R. W. Burnet and Mr. R. M. Routledge are hon. secs. *pro tem.*

WILD BEASTS IN CAPTIVITY

FOR zoological purposes it is doubtless desirable to encourage the collection and exhibition of those animals which are not common in this country. Travelling menageries are a necessity, since a very large proportion of the people would not, even in these days of cheap railway travelling, be able to see zoological specimens if they were not brought to their doors. At the same time, we think there is need of some new provision for the protection of the unfortunate wild beasts held in captivity in menageries. Attention has recently been drawn to the cruelties practised by keepers and those who exhibit these animals. Would it not be possible to issue special instructions to the police generally, including constables of rural districts, to keep a watch on the conduct of these travelling shows? It would be better to have a few vexatious prosecutions than to permit such outrages as are too often committed in menageries for the delectation of the public.

DIPHTHERIA AT HAMBLEDON.

THE frequent occurrence of diphtheria and of allied affections of the throat at Hambledon, in Hampshire, has recently attracted a good deal of attention. In August and September last some forty cases and thirteen deaths are stated to have occurred there, the school being temporarily turned into a hospital. Then came an apparent lull in the outbreak, but last week a sudden recurrence took place. The local authority and their officers have investigated the circumstances of the outbreak; but their efforts to stay it, whether by school-closing or by securing improved water-supply and other sanitary arrangements, have failed. Locally, there is an impression that the height of the springs affects the incidence both of this disease and of scarlet fever, and it is alleged that both diseases follow a somewhat similar course. These persistent recurrences of diphtheria in different parts of the country are becoming a matter of grave importance, the more so as the causes to which they are due are as yet involved in much obscurity.

OVERHEAD TELEGRAPH WIRES.

AT length a protest is beginning to be made against the peril of overhead wires. The allegations of danger from this Damocletian terror are not exaggerated. It has, indeed, so happened that in one or two of the "breakings" which have taken place nothing very serious ensued; no head has been cut off, or more than a few slight injuries actually inflicted, but this is something to be thankful for rather than to boast about or build upon. Beyond cavil or question, any one of those wires may break and so fall as to do irreparable damage. It is monstrous that the multiplication of perils of this description should be permitted. It takes a great deal to rouse public opinion, but we may hope it is now fairly awakened, and, being so, those who have the management of our domestic affairs will probably begin to recognise the expediency of taking action for the public safety.

LODGING LUNATICS.

THE Commissioners in Lunacy act spasmodically in the matter of searching for *certifiable* cases of lunacy residing in unlicensed houses. They swoop down every now and again on some unoffending person with all the magnified might of their office, as though their chief purpose were to make out a claim to the continuation of the fifteen thousand pounds granted annually for the maintenance of the Commission. Something of this sort is generally done just before the meeting of Parliament. Doubtless it is a coincidence; but there is a case on now. It would be better if the Commissioners were more continuously active in the interests of the really insane.

JUVENILE DRUNKENNESS.

THE accounts published of juvenile drinking at Birmingham and Warrington are truly shocking. What have the friends of education to say to the development of such tastes, and the taste for tobacco, in the young mind of late years? At Warrington three boys bought a pint of whisky, and drank it, undiluted, out of an egg-cup. One of the boys, aged twelve, died. Three girls at Birmingham, aged respectively nine, twelve, and ten, drank two shillings' worth of whisky. They were afterwards found in a helpless state of

intoxication, and one continued ill. These are appalling facts. They suggest that something in education is wanting either in a moral, social, or intellectual way to obviate such ignorance. They suggest one still more urgent lesson, that publicans who sell drink to children ought to be severely punished.

MR. JUSTICE HAWKINS is not the only English judge who has taken a lenient view of the practice of fighting with one's natural weapons—the fists. A few years ago the present Master of the Rolls, then Mr. Justice Brett, inflicted a nominal punishment upon some pugilistic enthusiast who had had the misfortune to cause indirectly his opponent's death. If we remember rightly, the "set to" in the latter case was an appeal to might as the arbiter between two parties who had disagreed upon a supposed point of honour. There is evidently a tendency on the part of some of the occupants of the judicial bench to look with a compassionate, if not with an approving, eye upon these encounters. There can be no question that the "fist" is preferable to the "knife."

THE number of students at Edinburgh University in the Faculty of Medicine during 1883 was 1781. Of this number, 682 were from Scotland, 620 from England, 33 from Ireland, 123 from India, 264 from the different British colonies, and 59 from foreign countries. The degree of Doctor of Medicine was conferred upon 31 gentlemen, and 189 took the degrees of Bachelor of Medicine and Master in Surgery, the proportion of students in this Faculty on the Register proceeding to graduation being 1 in 8.

IN connexion with the new Obstetric Hospital which is to be built in Bombay, it is said that the Governor has unfortunately not acted according to the advice of the Civil Surgeon-General, with the result that it will not form part of the Grant Medical College, which it undoubtedly should have done; but that it will be handed over to the lady medical practitioners, one of whom, Miss Pechey, late of Leeds, has already arrived in Bombay.

ANOTHER accident in the hunting field is reported. The sufferer on this occasion is Mr. H. T. Barclay, whose horse failed to clear a fence to which it was put, and fell, kicking its rider in the face. Yet, considering the number of people who hunt, accidents resulting from the sport must be regarded as proportionately rare, and when they do occur usually take the form of fracture of the clavicle.

A NEW danger attending the use of paraffin lamps in insufficiently ventilated rooms has been disclosed at Ballyverdaugh, near Ballycastle, where two lads were found on Monday morning suffering from symptoms of suffocation arising from the fumes of a paraffin lamp which had been left alight on their retiring to bed. One of the boys has died, and the other is not expected to recover.

AN interesting pathological and clinical account of cases of trichinosis observed during the recent severe epidemic at Emersleben may be read in the *Gazette Médicale de Paris* for January 12th.

MR. H. G. ARMSTRONG, M.R.C.S., L.S.A., has been elected to the post of Medical Officer to Wellington College, in the room of Mr. Barford, resigned.

M. FOUQUET has been awarded a gold medal of the first class for his excellent work during the recent Egyptian epidemic of cholera.

THE retirement of Mr. J. Russell Lowell from the Rectorship of St. Andrews University having made another appointment necessary, Lord Reay has been chosen for the post by a small majority of votes over those given for Mr. Gibson, M.P.

M. ALPHONSE GUÉRIN has succeeded to the chair of President of the French Academy of Medicine, just vacated by M. Hardy.

A CLEAN bill of health is now issued to all vessels leaving Egyptian ports. No cases of cholera have been officially notified in Egypt since December 26th.

MIDDLESEX HOSPITAL MEDICAL SOCIETY.

THIS the oldest Medical Society in London held a most successful conversazione in the school buildings of the hospital on Thursday evening, Jan. 10th. It was attended by about 200 gentlemen, including nearly all the members of the hospital staff. Dr. Arthur Edis, the President, occupied the chair at an introductory meeting, at which Dr. Spencer Cobbold, F.R.S., gave an address on Hæmatozoa, which will be fully reported in our next issue.

At the close of the address a vote of thanks to Dr. Cobbold was proposed by Sir Joseph Fayrer, seconded by Dr. Harling, and carried unanimously. Dr. Cobbold proposed a vote of thanks to Dr. Edis for taking the chair, which was also carried. Dr. Heneage Gibbes gave a demonstration of various bacilli in the museum, and Dr. Cobbold showed a considerable number of microscopical preparations illustrating his paper. Mr. T. B. Sutton exhibited a number of specimens of rickets and mollities ossium occurring in animals. Messrs. Krohne and Sesemann, Hawksley, Meyer and Meltzer, and Pickard and Curry, sent a large number of new surgical and optical instruments and appliances. Mr. Hawksley showed a Trouvé electric light, supplied by a small portable storage battery.

DR. ROGERS AND THE WESTMINSTER UNION.

AT a meeting of the Council of the Poor-law Medical Officers' Association, held at their rooms, 3, Bolt-court, Fleet-street, on Wednesday, the 16th inst., the subjoined resolution was unanimously adopted:—

"That this Council cordially congratulates its Chairman, Dr. Rogers, on the removal of his suspension as surgeon to the Westminster Workhouse; but at the same time desires to record its disapproval of the tone of the communication received from the Local Government Board containing the said order, as facts do not appear to this Council to justify the strictures passed upon that gentleman. The Council further desires to express its opinion that the action of the department in writing such a letter is calculated to seriously imperil the necessary independent action of Poor-law medical officers throughout the country in the performance of their duty." It was also resolved that a copy of the above resolution should be sent to the medical journals.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 6242 births and 3523 deaths were registered during the week ending the 12th inst. The annual death-rate in these towns, which had been equal to 20·6 and 22·2 per 1000 in the two preceding weeks, declined again last week to 21·0. During the last thirteen weeks of 1883 the death-rate in these towns averaged 21·2 per 1000, against 22·1 and 23·0 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 13·7 in Portsmouth, 13·8 in Leicester, and 17·2 in Bristol. The rates in the other towns ranged upwards to 27·6 in Oldham, 28·4 in Manchester, 28·7 in Leeds, and 28·0 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-

eight towns, which had been 413 and 447 in the two previous weeks, further rose to 456 last week; they included 117 from scarlet fever, 116 from measles, 99 from whooping-cough, 51 from "fever" (principally enteric), 32 from diphtheria, 29 from diarrhœa, and 12 from small-pox. No death from any of these zymotic diseases was registered last week in Halifax, whereas they caused the highest death-rates in Leeds, Manchester, and Nottingham. The highest death-rates from scarlet fever were recorded in Leeds, Sheffield, and Manchester; from measles in Salford, Oldham, and Nottingham; from whooping-cough in Nottingham and Manchester; and from "fever" in Cardiff. The 32 deaths from diphtheria in the twenty-eight towns included 15 in London, 6 in Leeds, 3 in Liverpool, and 2 both in Huddersfield and in Hull. The 12 deaths from small-pox showed a decline of 16 from the number in the previous week, and included 7 in Birmingham, 2 in London, 2 in Sunderland, and one in Liverpool. The number of small-pox patients in the metropolitan asylum hospitals, which had been 89, 98, and 102 on the three preceding Saturdays, further rose to 107 at the end of last week; 21 new cases were admitted to these hospitals, whereas in the four previous weeks they had declined from 29 to 15. The Highgate Small-pox Hospital contained 10 patients on Saturday last, four new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 355 and 387 in the two preceding weeks, were 379 last week, and no fewer than 122 below the corrected weekly average. The causes of 91, or 2·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Brighton, Newcastle-upon-Tyne, and in four other smaller towns. The proportions of uncertified deaths were largest in Salford, Halifax, Sheffield, and Leicester.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 21·1, 22·1, and 25·4 per 1000 in the three previous weeks, declined again to 22·1 in the week ending the 12th inst.; this rate exceeded by 1·1 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 18·4 and 18·8 in Perth and Edinburgh, to 22·9 and 25·7 in Greenock and Glasgow. The deaths in the eight towns included 74 which were referred to the principal zymotic diseases, against 86 and 74 in the two preceding weeks; 17 resulted from diphtheria, 13 from whooping-cough, 13 from diarrhœa, 11 from "fever," 11 from measles, 9 from scarlet fever, and not one from small-pox. These 74 deaths were equal to an annual rate of 3·1 per 1000, which was 0·4 above the mean rate from the same diseases in the large English towns. The rates from these diseases in the Scotch towns ranged last week from 0·0 in Perth to 3·3 in Glasgow, 3·7 in Aberdeen, and 5·4 in Paisley. The 17 fatal cases of diphtheria showed an increase of 4 upon the number in the previous week, and included 6 in Glasgow, 4 in Dundee, 4 in Aberdeen, and 2 in Paisley. The 13 deaths from whooping-cough showed a further decline from recent weekly numbers; no fewer than 11 occurred in Glasgow. The deaths attributed to diarrhœa, which had been 13 and 9 in the two previous weeks, rose again to 13 last week; and the 11 deaths referred to "fever" (including 4 in Glasgow, 3 in Edinburgh, and 2 in Aberdeen) showed an increase upon recent weekly numbers. Of the 11 deaths from measles, 6 occurred in Edinburgh and 3 in Leith; and the 9 fatal cases of scarlet fever included 6 in Glasgow and 3 in Edinburgh. The deaths attributed to acute diseases of the respiratory organs in the eight towns, which had been 108 and 145 in the two previous weeks, declined to 105 last week, and were no fewer than 83 below the number in the corresponding week of last year. The causes of 73, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 36·1, 27·5, and 28·7 per 1000 in the three preceding weeks, declined again to 27·1 in the week ending the 12th inst. The death-rate in the city during the fifty-two weeks of 1883 averaged no less than 29·2 per 1000, while the rate did not exceed 20·4 in London and 19·2 in Edinburgh. The 182 deaths in Dublin last week showed a decline of 11 from the number in the previous week, and included 11 which were referred to scarlet fever, 6 to "fever," 3 to whooping-cough, 2 to diarrhœa, 1 to diphtheria, and not one either to small-pox or measles. Thus 23 deaths resulted from the principal zymotic diseases, against 16 and 15 in the two previous weeks; they were equal to an annual rate of 3·4 per 1000, while the rate from the same diseases was 2·5 in London and 3·2 in Edinburgh. The fatal cases of scarlet fever in Dublin, which had been 6 and 7 in the two preceding weeks, further rose to 11 last week. The 6 deaths referred to "fever" also showed an increase upon the numbers returned in the two previous weeks. The fatal cases of whooping-cough, however, showed a slight decline. Four deaths resulted from different forms of violence, being fewer by 3 than the number in the previous week. The deaths of infants showed an increase upon recent weekly numbers, while those of elderly persons were less numerous. The causes of 24, or more than 13 per cent., of the deaths during the week were not certified.

ENGLISH URBAN MORTALITY IN 1883.

The death-rate in the twenty-eight large English towns dealt with by the Registrar-General in his weekly returns was lower during last year than in any previous year on record, and did not average more than 21·6 per 1000, or only 2 per 1000 above the rate that prevailed in the whole of England and Wales. The mean death-rate in these large towns averaged 23·6 per 1000 in the ten years 1872—81, and ranged from 25·1 in 1875 to 21·7 in 1881, which but slightly exceeded the low rate in 1883. Pending the publication of the Registrar-General's Annual Summary of his Weekly Returns for 1883, the following mortality statistics for these twenty-eight large towns, derived from the returns for the fifty-two weeks of last year, may be interesting to medical officers of health and others for comparative purposes. The towns are ranged in the order of their death-rates from all causes, from the lowest.

	Death-rates per 1000.	
	All causes.	Principal zymotic diseases.
Bristol	17·9	1·2
Derby	18·1	1·5
Bradford	18·3	1·5
Portsmouth	18·6	2·2
Brighton	19·2	2·3
Leicester	19·4	2·4
Norwich	19·7	1·0
Birkenhead	19·9	1·8
Halifax	20·0	1·0
Cardiff	20·2	2·5
London	20·4	2·7
Plymouth	20·9	2·1
Birmingham	21·3	3·1
Nottingham	21·3	2·1
Wolverhampton	21·3	1·6
Huddersfield	21·3	1·7
Bolton	21·7	2·2
Oldham	22·0	1·5
Salford	22·4	3·3
Hull	22·8	3·2
Sheffield	22·9	4·0
Leeds	23·3	4·0
Sunderland	24·5	2·5
Blackburn	24·5	2·8
Newcastle-on-Tyne	25·5	4·3
Preston	25·5	4·3
Liverpool	26·7	4·5
Manchester	27·6	3·6

It appears, therefore, that the death-rate during last year, which averaged 21·6 in the twenty-eight towns, ranged from 17·9 in Bristol and 18·1 in Derby, to 26·7 and 27·6 in Liverpool and 27·6 in Manchester. Thus the death-rate in Manchester exceeded the mean rate in the twenty-eight towns by nearly 24 per cent., and the rate in Bristol by more than 54 per cent. A continuance of such widely different death-rates in a stationary or life table population would imply a mean duration of life equal to fifty-six years in Bristol, whereas it would not exceed thirty-six years in Manchester. Compared with those that prevailed in 1882, the death-rates last year showed a general decline; the rates in Birmingham, Sheffield, Leeds, Newcastle-upon-Tyne, Liverpool, and Manchester, however, showed an increase in 1883. It is worthy

of note that the death-rate in each of the seven Lancashire towns included in the Registrar-General's list exceeded the mean rate in the twenty-eight towns, and three of them —Preston, Liverpool, and Manchester—stand at the bottom of the list. The rate from the principal zymotic diseases averaged 2·9 per 1000 in the twenty-eight towns, and ranged from 1·0 in Norwich and Halifax, to 4·3 and 4·5 in Preston and Liverpool. Although the zymotic rates do not run in precisely the same order as the rates from all causes, there is a considerable relative agreement between them. For instance, the zymotic rate among the ten towns having the lowest death-rate from all causes, ranged from 1·0 to 2·5; while among the ten towns at the bottom of the list, the zymotic rate ranged from 2·5 to 4·5 per 1000. There can be little doubt that those conditions which produce a high death-rate from all causes also conduce to excessive zymotic mortality, although the former may not always be directly due to the latter. Infant mortality, measured by the deaths under one year of age to births registered, was equal to 156 per 1000 in the twenty-eight towns last year, against 162 in 1882. The lowest rates were 133 in Bristol, 134 in Sunderland, 138 in Portsmouth, 143 in Derby, and 146 in London and Brighton. The highest rates of infant mortality were 171 in Salford and Hull, 173 in Blackburn, 174 in Bolton, 175 in Huddersfield, 177 in Manchester, 185 in Liverpool, 189 in Leicester, and 210 in Preston. Infant mortality is in great measure governed by the fatality of summer diarrhœa, and it is noteworthy that six of the nine towns showing the highest rates of infant mortality in 1883 were Lancashire towns.

THE SERVICES.

THE NEW SERVICE DRESS.

The new active service dress of the army has been submitted to Her Majesty the Queen. In shape the new garment is somewhat like that of the present service frock. It is provided with pleats at back and front, so that on service these can be undone, and a loose coat made. Buttons are provided on the arms, so that the wristbands can be made tight or loose at will, and the garment presents a smart and serviceable appearance, and will in all probability become the future dress of the British infantry.

Surgeon-Major F. Odevaine, 29th Punjab Native Infantry, Surgeon-Major J. Kelly, 15th Sudhiana Sikhs, and Brigade Surgeon C. MacDowall, Principal Medical Officer, Quettah, are about to proceed to Europe shortly on sick-leave. Surgeon John C. Lucas, 23rd Bombay Native Infantry, proceeds on furlough to Europe shortly on private affairs.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Alexander Long is granted retired pay, with the honorary rank of Brigade Surgeon.

INDIA OFFICE.—Deputy Surgeon-General Stephen Chapman Townsend, C.B., of the Bengal Army; Deputy Surgeon-General William Burns Beatson, M.D., of the Bengal Army; Brigade Surgeon James Rawlinson Jackson, M.D., of the Bengal Army; and Brigade-Surgeon Alfred Sanderson, M.D., of the Madras Army, have retired from the service.

ADMIRALTY.—Staff Surgeon Thomas Hall Atkinson has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet; Deputy Inspector-General Gordon Jackson has been appointed to the Chatham Division of Royal Marines, for temporary service, vice Deputy Inspector-General Breen, the appointment of Dr. Fegan being cancelled.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the directors of the Society was held on Wednesday, Jan. 9th, at 5 P.M., in the rooms of the Royal Medical and Chirurgical Society, 53, Berners-street; Mr. Charles Hawkins, Vice-President, in the chair. The resignations of two members were accepted, the deaths of two reported, and two new members elected. The treasurer informed the meeting that a Christmas present had been made to the widows and orphans in December last, amounting to £307. Grants to the extent of £1241 were made to fifty-eight widows, five orphans, and three orphans on the Copeland Fund. The expenses of the quarter were £64. One fresh application was received from a widow, and a grant made.

Correspondence.

"Audi alteram partem."

WELLINGTON COLLEGE.

To the Editor of THE LANCET.

SIR,—As the accompanying correspondence between the Vice-President of Wellington College and myself may be a subject of interest to your numerous readers and one of public interest, I shall be obliged if you will permit it to appear in the pages of THE LANCET.

Very truly yours,

Wokingham, Jan. 15th, 1884. J. G. BARFORD.

15, Cromwell-road, South Kensington, May 16th, 1883.

MY DEAR SIR,—Under the existing circumstances at Wellington College I write to say that I should feel obliged to you if you would narrowly watch the position, and that if in your judgment you should see any sign of any impending epidemic you will communicate with Mr. Wickham or myself at once. I am sure this is hardly a necessary precaution for me to take, as you will naturally be watching closely the course of events; but I am very anxious to be able to answer the questions of governors and others in the event of anything occurring.

Believe me, yours very truly,

J. G. Barford, Esq. W. P. TALBOT.

The Firs, Wellington College, November, 1883.

DEAR SIR,—In your letter of May 16th you asked me to narrowly watch the position, and that if, in my judgment, I should see any sign of illness recurring I should communicate with you at once in order that you might answer any question of the governors. Twelve boys have been affected this term with the same kind of sore throat with which more than 100 boys were affected during the past two terms, making in the year more than a third of the school. The number this term is not in excess of previous terms anterior to the epidemic of this year. Just as then a few or isolated cases indicated some insanitary condition and preceded the larger outbreak, so these cases indicate that, much as the governors have had done to improve the sewerage and water-supply of the College, nevertheless they have not succeeded in removing the evil. One case beginning with the throat affection has assumed a septic form, first affecting the glands of the neck, then the joints, and ultimately causing pericarditis and slight endocarditis. This case resembles in every respect except in degree one of the four fatal cases of blood-poisoning seen at the time by Dr. Garrod of Harley-street. This case has done well, and only a slight trace of the heart mischief remains. Another boy has gone home with a consolidated lung on one side and the remains of pleurisy on the other. This case arose, as far as I can trace, from exposure during two very foggy evenings. The temperature range and enlargement of spleen in this case indicate, like so many other cases, a malarial cause. The boy's mother assured me that he had always previously enjoyed perfect health. In its main features this case resembled the fatal case of acute lung disease in Lord Ormathwaite's son, and had many features in common with Wilson's case. The tendency to acute suppuration (the formation of pus) within the chest in acute inflammation there is very marked at Wellington College.

In the memorandum I forwarded to you and Dr. Harper, through Mr. Wickham, nearly two years ago, for your private information as a committee on medical subjects, I called your attention to the great prevalence of fogs and mists in the valley of Wellington College grounds. If you look at the Ordnance map you will see that the name handed down from time immemorial, and repeated in the map of the last Ordnance survey, is that of "Mirk Bottom," as expressing, I expect, the foggy nature of the locality ("mirk" or "murk" in Berkshire being synonymous with mist or fog; a damp misty day here is spoken of as a murky day). All the other names, except Ambarrow and Edgbarrow, for the two mounds on the estate, have been given within your own and my recollection.

In Wellington College valley there are mists and fogs to be seen morning and evening, when on the higher lands, north-east and west of the College valley, it is quite clear. This fact is one of local notoriety. To these, I feel assured, are to be attributed the redevelopment of throat affections

this term and the preponderance of chest affections here, to which I have from time to time directed attention in my annual reports.

Now that the sewers and water-supply are made efficient they cannot be suspected of causing the present illness except so far as there may be defects at the sewerage outfall from the inefficiency of the A B C process in use there. A Royal Commission on this process states that "it is plain not only that the A B C method falls altogether below irrigation in its powers as a mode of sewage disinfection, but that it altogether fails." But you, as a director of the A B C Process Company, can judge of the value of this statement better than I can.

The engineer in his report appears to me to ignore the evil arising from damp through the subsoil of clay which exists under the superficial layer of sand. Of the extent of this clay on the College estate some idea may be formed from the fact that for thirty years the large brick fields in the College grounds yielded a supply of bricks to the whole neighbourhood, some years turning out from four to five millions of bricks. Yet no one visiting the place would suspect the existence of such a subsoil. This explains to a great extent the mists and fogs, and until it is drained they must prevail. In addition to the clay subsoil over large portions of the grounds the "iron pan," or iron oxide concretion between the clay and the surface, interferes very much with the natural drainage of the rainfall. Till this is broken the surface water cannot percolate except so slowly as not to escape through it between one rainfall and another. In his report the engineer represents that the sewage of the village of Crowthorne trickles along this clay subsoil to the College valley, to the danger of any superficial water-supply. If so, it must impregnate the water of the lakes which are supplied by superficial drainage. A piece of white porcelain dropped into the lakes is lost to sight at about twenty inches below the surface, and you know when the water was seen in bulk in the white tile-lined bath it had the colour of weakened coffee. Such a bulk of impure water used for bathing in summer cannot be wholesome. I believe it was to bathing in this that the two cases of remittent fever (Lord Lathom's son and Vaughan), which gave so much anxiety at the time, were to be attributed. The water in the lakes is an indication of the nature of the subsoil water in the swampy parts of the College grounds. It is charged with organic matter, and must impregnate mists or fogs which arise from it. If a handful of the top surface of decayed organic matter from the damper portion of the College estate is taken up, the under portion has the same musty smell as a damp closed-up cellar. This is quite sufficient, without any sewage impregnation, to give the diphtheritic character to what would otherwise be a simple sore-throat. This character once imparted to a throat no one can tell when any given case may become "septic" or assume the form of blood-poisoning, like the fatal cases of the past three years. Nothing but trenching through the "iron pan" and thorough land drainage to remove surface and subsoil moisture can remedy this. What has been done up till now is a mere pretence at land drainage.

At a school near here of fifty boys of the same class as those at the College, where the fogs and mists prevalent on the damper portions of the College grounds do not reach, and where the ground around is well drained and the playground dry, not a single case of diphtheritic throat has occurred, nor a single case of acute lung disease in the past fourteen years I have attended the school. What, then, makes the difference between these boys and the College boys? Mere accident or chance cannot explain this. One set of boys are exposed to the mists and fogs and the others are not.

When Sir William Gull walked over that portion of the estate called Mirk Bottom, during the driest time of year, after having inspected other portions of the estate, his remark to me was: "I look upon your College as a Romana and your grounds as a Campagna." He was as assured as I was of the malarial nature of the cases of illness here at the time among the boys. Sir William Gull has, I believe, expressed the equivalent of this to you in person, as he explained to Mr. Wickham when here how the evil arose from the ground. Perhaps the more modern name, "telluric poison," would express the condition better than the older malaria. One of the highest authorities on this subject writes that it prevails *in sandy plains containing organic matter, if there is a subsoil of clay or marl,*" which exactly describes the soil at Wellington College.

An engineer from Italy was visiting one of the house masters last term, and in walking from the College to the master's house one evening, he remarked that he felt malaria in the air. Such testimony is noteworthy. That we have had illness here of a distinct malarial type there can be no doubt, and it is displaying the same character in the boys who have been ill this term. Until some efficient system is adopted to get rid of the excessive soil moisture and lessen the mists and fogs the name "Mirk Bottom" of the Ordnance map will express the characteristic features of Wellington College valley, and Sir William Gull's definition of the College as a "Romana" and the grounds around as a "Campagna" will remain a correct one.

Very truly yours,

The Hon. W. P. Talbot. J. G. BARFORD.

P.S.—With these exceptions the health of the boys at the College is as good as usual. May I ask that this be read at the governor's meeting on Monday next?

Oakington, Harrow, Nov. 13th, 1883.

DEAR SIR,—I beg to acknowledge the due receipt of your letter of the 16th inst. Yours faithfully,

J. G. Barford, Esq. W. P. TALBOT.

The Firs, Wellington College, Wokingham, Dec. 19th, 1883.

DEAR SIR,—I wrote to the secretary on the subject of your letter of the 16th inst., and, as I learn there is to be a meeting of the Committee of Governors to-morrow, and the third school term of this year ends to-day, I think you may wish to know what influence the improved sewerage and water-supply of the College has had on the health of the boys. I regret to say there has been no appreciable diminution either in the number or alteration in the character of the throat affections with which the College has been visited each term during the past two years.

I have classed the throat affections under two heads: (1) diphtheritic throat; (2) sore-throat; and the total of these two amounts to 175 in the school year of thirty-six weeks, thus making an average of about five cases a week. The diphtheritic throats in every case have had a well-marked diphtheritic deposit, while the sore-throats have all the ordinary symptoms of the other cases, but with the absence of the diphtheritic deposit, but indicate as clearly as the diphtheritic throats some insanitary cause common to both. The following tabular statement presents the number of each term of the present year:—

	Diphtheritic throats.	Sore throats.	Total.	Days in each term.
Christmas to Easter	15	37	82	64
Easter to Midsummer	46	20	66	113
Midsummer to Christmas	32	25	57	85
	93	82	175	

Two cases of diphtheritic croup simultaneously with the diphtheritic throats, and two cases of erysipelas, having, I believe, a similar cause as the throat affections, have occurred. Sir William Gull believes there is some close intimacy between these throats and erysipelas, and so our experience at Wellington College indicates, as well as a close intimacy between them and the acute chest diseases, one fatal and the other nearly so, of the present year, to which I referred in my former letter.

From a very careful observation of these 175 cases of throat affection, I can trace in their minor complications a distinct relation to the three fatal cases of blood-poisoning and to previous cases of blood-poisoning. I am quite aware that to arrive at a conclusion of this kind two things are necessary: (1) an opportunity to collect facts to form a judgment (and certainly the illness at Wellington College has afforded me this); and (2) a capacity to form that judgment. Whether I have the latter I will not say. I know you and the head master discredit my judgment in this respect; but the head master refuses to accept even Sir William Gull's judgment of the insanitary surroundings of Wellington College. I cannot, therefore, wonder that mine is discredited; but I believe the conditions which caused these illnesses and deaths are still in existence, and are a danger to the health of the boys and human life.—Yours, very faithfully,

The Hon. W. P. Talbot. J. G. BARFORD.

15, Cromwell-road, South Kensington, Dec. 20th.

DEAR SIR,—I write a line to say that I only received your letter this morning, which I laid before the committee. I hear that these throats are by no means confined to Wellington College.—Yours faithfully, W. P. TALBOT.

J. G. Barford, Esq.

THE DISCUSSION ON "CATHETER" OR URINARY FEVER.

To the Editor of THE LANCET.

SIR,—1. It is plain from the letter of Mr. Berkeley Hill that I seriously misunderstood the meaning of the speech which he made at the Medical Society in the course of the discussion upon urinary fever, and that my reply, provoked by the misunderstanding, into culpable warmth, was both uncalled for and irrelevant. With exemplary candour and charity he has himself suggested this explanation; and it is the true and only one. Unfortunately, all that I can now do is to withdraw that reply and to express my sincere and great regret for having, even unwittingly, made it. I do not wish to be eager to excuse my fault; but on this occasion there are circumstances which justify me in pleading that among those persons who listened to Mr. Berkeley Hill I was not the only one who misapprehended the exact purport of his remarks.

2. When I spoke of the fever sometimes following catheterism as a low one, I did not in any way mean one which was slow or chronic. It is true that the first case which I saw lasted about three weeks, but the cases which I have since seen have been of much shorter duration. The last which I saw with Sir Henry Thompson lasted about twelve days, and the last with Mr. Buckston Brown about ten days from the commencement of the febrile movement. Indeed, it was just the suddenness of the deaths, which I saw occasionally following catheterism, which impressed my mind with the subject and moved it to further inquiry. When, therefore, I spoke with emphasis of cases on record I had in mind all febrile cases which lasted over a day, cases incidentally referred to by competent inquirers, and the admissions frankly made by Marx and Malherbe, who in their monographs set themselves to prove that the cause of urinary fever lay in interstitial nephritis and that death, when it followed, was due to uræmia.

3. Mr. Berkeley Hill says that in not one of the authors whom I have quoted is there recorded a fatal case of fever of the low insidious kind where the kidneys were found post mortem to be healthy. Now, I must here remind you that I was not speaking of cases of low, chronic, insidious fever, but of cases in which after catheterism fever suddenly arose, and more or less speedily put an end to life. Here is one case from Velpeau: A young man suffering from urethral stricture had been treated some years ago for the same complaint. Since then he had practised self-catheterism, but had neglected it for some time before admission. A bougie was easily introduced into the bladder, and the patient was again able to pass the catheter for himself. But the day after he had been last catheterised with a larger instrument by Velpeau he became feverish, had a severe rigor, and fell into a strong fever. By-and-by arose purulent arthritis, and on the sixth day after the beginning of the fever the patient died. The autopsy revealed stricture, thickening and false passage of the urethra, and inflammation of prostatic sinuses and plexuses. The prostate, bladder, ureters, and kidneys were all apparently healthy, and nothing was found in any of the other viscera. Although complicated by purulent arthritis, it will be seen that the case was not one of pyæmia, and that the kidneys were reported to be normal. Commenting upon this, and upon other like cases, Velpeau says: "Here are rather a large number of cases in which the gravest accidents, and even death itself, have supervened upon catheterism without our being able to find upon examination after death anything but some simple affection of the urethra."[1] Here, also, is a case from Marx, p. 18. A man, admitted under the care of M. Denonvilliers on June 24th, 1850, for stricture of the membranous part of the urethra, was treated by progressive dilatation until July 10th. On the 11th he was attacked with fever. On the morning of the 13th he was better; but on the evening of that day he became worse, and died on the morning of the 16th. On post-mortem examination it was found that, with the exception of notable hypertrophy of the spleen, all the organs of the body were healthy. Here, lastly, is a case from Malherbe (case 19, p. 113). The man, after catheterism, had repeated hæmorrhages, and suffered from such severe accessions of fever that treatment had to be suspended. Four months afterwards treatment was resumed, and although the patient had from time to time slight accessions of fever they were ascribed either to the formation of a small abscess or to a new localised infiltration in the neighbourhood of the urethra. Three months after the resumption of treatment a change was made in the use of instruments. From this time the patient became worse, and sank in six weeks. For the last fortnight of the patient's life he lay in a state of stupor, and although the pulse was very frequent the temperature was almost normal. After death it was found that the kidneys, exhibited before the Anatomical Society, although a little anæmic, were free from any lesion of structure, and that, with the exception of the liver, which was a little fatty, all the other organs were healthy. I have cited this case, not in support of my own position, which Mr. Berkeley Hill had misunderstood, but in answer to the objection advanced by himself that in none of the authors quoted by me there was recorded a fatal case of fever of the low insidious kind, where the kidneys were found, post mortem, to be healthy, and that all the examples of healthy kidneys adduced occurred in cases of death by shock, or as the consequence of the sharp paroxysmal form of catheter fever.

4. Although I believe that the majority of cases of chronic urinary fever arising out of long-continued (not recent) urethral or vesical disease are accompanied by interstitial nephritis, this is by no means proved to be as constant as Mr. Berkeley Hill contends; for as in one case we have seen that after long-continued recurring urinary fever the kidneys may remain intact, we are not forbidden to expect that such immunity may occasionally occur in other cases. And if we turn from the statistics of Mr. Berkeley Hill, which show no record of disease of the kidneys in 18 per cent., to the larger statistics of the same hospital quoted by Mr. Marcus Beck, we shall see that out of sixty-six deaths occurring from urinary diseases forty were due to secondary inflammation of the kidneys. Now, remembering the case quoted from Malherbe and the theory advocated by the leading workers at University College, unlikely to let renal changes pass unnoticed, it is surely not unreasonable to presume that in this large number of cases in which the state of the kidneys was unnoticed, there were some in which these organs were free from structural disease, and that therefore the association of nephritis with chronic urinary trouble was not constant and proved.

5. The nephritic complication of urinary fever has been always spoken of in this discussion as interstitial, and this is in my mind an additional reason for believing that the descriptions which have been given of it as respects the histological facts with such accuracy by Mr. Marcus Beck have been drawn from the examination of kidneys taken for the most part from subjects of long-standing disease. And although in recent cases the accuracy of Beck's description of the bare histological conditions of the kidney is incontestable, yet his interpretation of them, opposed as it is to the conclusions of other leaders in histological research and to the teaching of clinical medicine, is open to serious question. It is not, however, upon this point that I may dwell at present. I merely desire to say as the result of my own experience that in recent cases of catheter fever, especially in the young, the condition of the kidney resembles that which occurs in catarrhal nephritis, with this main difference, that the diseased conditions are not continuous, but in patches, and that here and there the smaller arteries are blocked by emboli, which are sometimes composed of micro-organisms of various kinds. It is probably this fact of the occasional catarrhal or septic nature of the renal complication which accounts for some of the recoveries from urinary fever. One does not usually expect the disappearance of fibro-nuclear material which has been deposited in the inter-tubular spaces.

6. But now, making every allowance for this nephritic complication, and even assuming that in some degree or other it always exists, we are brought back to the fact that in recent cases it is seldom, and in chronic cases it is not always, sufficient to account for death. Adopting the plan which, with one necessary exception, I have followed from the first, of taking the evidence in support of my contention from the admissions of those who differ from it, I quote upon this point the judgment of Mr. Marcus Beck. Speaking of the closing days of urinary fever, he says: "At the same time the secretion of urine continues in fair quantity, and the patient cannot therefore be said properly to die

[1] Leçons Orales, 1841, vol. iii., Article xi., p. 324, *et seq.*

of uræmia." Further on he adds: "As before stated, in many cases the real cause of death is not the damage to the kidney, for the excretion of urine remains abundant to the last, but the absorption from the abscesses or from the putrid urine in the pelvis. ..... On the other hand, the symptoms closely resemble, and, in fact, are often undistinguishable from, those of septicæmia."[2] Here, in the second place, is the admission made by Marx, at page 111 of his treatise:—"This has been told in order to prevent one seeing a nephritis where it does not exist. There remains, nevertheless, a certain number of cases..... in which one finds on the autopsy true nephritis. But if not limiting oneself to the nephritic theory, we enlarge the question, and say that the febrile accidents are always due to a functional if not organic lesion of the kidney, it seems to me that we should be not far from the truth." I quote in the third and last place the contention of Malherbe, given at page 86 of his monograph:—"Uræmic fever appears to be always the expression of a transitory or permanent lesion of the kidneys.....and this lesion is either a simple congestion or an interstitial nephritis."

I venture to think that I have now said enough to satisfy any fair mind of the justice of my contention, that in apparently healthy persons[3] catheterism is sometimes followed by fever, and that when this fever ends in death the autopsy fails in a certain small proportion of cases to reveal any sufficient structural cause of death.

I am, Sir, your faithful servant,

Cavendish-square, W., Jan. 1884. ANDREW CLARK, M.D.

NEPHRECTOMY FOR STRUMOUS PYELITIS.

To the Editor of THE LANCET.

SIR,—Will you allow me to make a few remarks upon the case of nephrectomy performed in the Sussex County Hospital and published in THE LANCET of Jan. 5th, as it suggests several questions of importance.

The recurrent attacks of hæmaturia associated with a renal tumour were very suggestive of new growth; but the condition found after death must, I think, have given rise during life to a certain amount of pus in the urine, and this would account for the slight cloud of albumen noticed before any blood appeared. Had the diagnosis of suppurating kidney been made, there is no doubt in my mind that the best method of treatment would have been to cut down upon the kidney in the loin and drain it antiseptically. Perhaps in every doubtful case it is well to aspirate the tumour through the loin to discover if there is any fluid before determining upon a more serious operation. The bursting of the cyst during its removal illustrates one of the points I insisted on in my address before the British Medical Association—viz., that a suppurating kidney should never be removed by the transperitoneal method, for the escape of pus and urine into the peritoneal cavity must almost certainly excite a fatal peritonitis if any accident happen to the cyst during its extraction. It is much to be regretted that consent to a post-mortem examination could not be obtained, but judging from the nature of the disease and from the small quantity of urine passed after the operation, it is probable that the other kidney was seriously damaged. This raises the question how best to determine the condition of the second kidney. Several ingenious but rather impracticable methods have been suggested. Dr. Luchmann has invented an instrument for grasping the orifices of the ureters in the bladder. Dr. Gluck has suggested exposing and compressing one ureter in the loin, then injecting subcutaneously ferrocyanide of potassium and testing the urine afterwards secreted by the other kidney. Dr. Polk has advised compressing the lower end of one ureter between a catheter in the bladder and a finger in the rectum; and Simon advised catheterism of the ureter after dilatation of the urethra in the female. All these methods are troublesome and scarcely to be relied upon. If, however, the patient be placed under careful observation, and not only the amount of urine passed but the amount of urea excreted in the twenty-four hours be determined by repeated observation, then, supposing this to be about the average quantity, and one kidney on examination be found extensively damaged, it follows that the other kidney is already doing more than a moiety of the work and can be relied upon when the first is removed. By observations of this kind much more accurate information will, I think, be obtained, than by submitting the patient to the danger and inconvenience of the methods alluded to. The operation of nephrectomy for strumous kidney, on the evidence of the post-mortem room, has been condemned by several surgeons as scarcely justifiable. I would not myself exclude these cases as a group, for I can still produce a man on whom the operation was performed with marked relief nearly four years ago. But I think the greatest care must be exercised in deciding what operation will benefit the patient, and when nephrectomy is being considered it is all important to learn as far as possible the excreting power of the kidney which is to be left.

I am, Sir, your obedient servant,

R. CLEMENT LUCAS, B.S., F.R.C.S.

Finsbury-square, Jan. 14th, 1884.

[2] Reynolds, vol. v., pp. 551—554.

[3] A habitually low density of urine justifies suspicion as to the soundness of the kidneys, but is not conclusive as to the existence of unsoundness: there may be renal inadequacy without discernible structural change.

TREATMENT OF TYPHLITIS.

To the Editor of THE LANCET.

SIR,—My attention having been recently somewhat forcibly directed to the subject of typhlitis, I turned to "Quain's Dictionary of Medicine" to see what was there said about it. To my astonishment, under the head "Treatment" I read the following: "The indications are (*a*) to relieve constipation and dislodge accumulations from the cæcum with as little irritation as possible, using laxatives combined with sedatives—e.g., calomel, colocynth, confection of senna, or saline aperients with opiates, and large warm enemata; the latter are indicated when aperients by the mouth set up or increase vomiting, or fail to relieve the bowels, or cannot be prescribed because of obstinate vomiting." It is true that a few lines later on the author of the article says "all strong aperients are to be condemned"; but under what category should colocynth be classed? Dr. Jarrod places it among the drastic purgatives, and Dr. Ringer calls it a powerful purgative.

The recommendation of colocynth in typhlitis immediately recalled to my memory Dr. Tanner's caustic remarks on such treatment: "I have had to watch a few cases where no little mischief has arisen from the abuse of purgatives, and in one particular instance, had it been necessary for me to state the cause of death, I could hardly have conscientiously given any other certificate than 'compound colocynth pills.'" The whole treatment of typhlitis is summed up in the one word *rest*, using it in the sense in which Hilton employed it—viz., functional rest. This is to be obtained by abstaining from the use of all purgatives, and giving opium (best borne in the solid form). If necessary the rectum may be emptied by an enema.

As regards food, I think the exclusive use of milk is a mistake, as it forms a very hard motion. Meat juices, such as beef-tea, veal broth, chicken broth, &c., are to be preferred.

I am, Sir, your obedient servant,

F. DE HAVILLAND HALL.

Queen Anne-street, Jan. 2nd, 1884.

"SACCULATED BLADDER IN THE FEMALE."

To the Editor of THE LANCET.

SIR,—In reporting a case of stone in a sacculated female bladder I used these words: "I cannot suppose that it [sacculation] is so rare an event as is indicated by the experience of Guy's; he would be an indefatigable pathologist who would take note of the condition of the bladder in every case [3000], so as to be able to say that it never had occurred."

Dr. Hale White seems to think that this mild supposition is an "aspersion" on those who conducted the examinations. Let me assure him that nothing was further from my intention than to asperse anybody. My paper was read to our local Society in July last, before the publication of the Pathological Transactions, and therefore I had only the meagre report in the journals to refer to. I regret, however, that I did not read the full account of Dr. White's case before sending my own to THE LANCET. Had I done so I should have omitted all reference to his case, because it is almost certain that it was not one of sacculated bladder at all.

I am, Sir, your obedient servant,

Norwich, Jan. 14th, 1884. WM. CADGE.

"DIRECT TREATMENT OF SPINAL CARIES BY OPERATION."

To the Editor of THE LANCET.

SIR,—I have read Mr. Treves's paper on the above subject, brought before the Royal Medical and Chirurgical Society of London, and can endorse his views to a partial extent as evidenced by my own practice. From my own personal experience, and from facts observed at the mortuary, I have learnt to view with slight favour the opening of abscesses in connexion with vertebral disease, and have taught that, as a rule, any such interference is fraught with inconveniences both to the patient and surgeon. A man, aged thirty-eight, was admitted into the Westminster Hospital in May, 1879, suffering from diseased lumbar vertebræ with deformity, associated with a large psoas abscess which had burst below Poupart's ligament in the right thigh. I wished to ascertain, by making a dependent opening in his loin, if good drainage might not assist in promoting a cure. On May 29th, having had a silver probe specially made twenty inches long, I passed it carefully through the abscess opening in Scarpa's triangle along the sheath of the psoas muscle towards the right loin, and without any difficulty I could feel exposed bone. Having withdrawn the probe and made a short bend at its point (45°), I reintroduced it along the psoas sheath until it touched the top of the abscess wall, directing the point of the probe towards the loin. I then cut down on it, introduced my forefinger through the lumbar wound into the abscess sac, felt the denuded bone, and washed out the detritus with a stream of warm water through the tunnel from the right groin to the loin. The lumbar wound was maintained open by a drainage anchor. The patient was discharged with both wounds healed, but the old abscess opening in the groin seemed inclined to reopen on his assuming the erect posture. When compulsorily pressed to open a psoas abscess I have always chosen the loin as the point of selection, being unable to see why a lumbar abscess should have the honour of exemption from ordinary surgical customs—viz., a large dependent opening for the promotion of cleanliness and good drainage.

I am, Sir, your obedient servant,
RICHARD DAVY,
Jan. 14th, 1884. Surgeon to the Westminster Hospital.

To the Editor of THE LANCET.

SIR,—An operation very similar to that described by Mr Treves in your issue of to-day (proceedings of the Royal Medical and Chirurgical Society) has been already performed on three occasions by Dr. William Macewen in the Royal Infirmary and Sick Children's Hospital of this city. I had the pleasure of assisting Dr. Macewen in each of these cases, and was present at a lecture delivered by him on the subject during the course of the last summer session to the students attending his clinical class. In a communication of this kind it would be out of place to enter into matters of detail; but I may be permitted to state that in two of the patients numerous small sequestra were found, and in the third surgical interference was resorted to, in order to prevent the burrowing of pus into the psoas muscle. The results subsequently obtained were excellent, and leave no doubt in the minds of those who have watched the cases during their progress towards recovery that the course pursued was the right one.—I am, Sir, your obedient servant,

JAS. WHITSON, M.D., F.F.P. & S.G.
Glasgow, Jan. 12th, 1884.

THE DEGREE OF TEMPERATURE NECESSARY TO DESTROY INFECTIOUS GERMS.

To the Editor of THE LANCET.

SIR,—A question of much practical interest and one about which authorities have no very decided opinions, yet a question of vital importance in staying the spread of infectious disease, is, What is the minimum heat required to render the germs of disease inert? In the stoving of infected materials to what heat should the oven be raised? and for how long should the temperature be sustained? In nearly every parish throughout the country disinfection is carried out by means of dry heat. It is a convenient mode, inexpensive, and generally thought to be effective. Dr. Parkes writes ("Practical Hygiene," p. 482): "The temperature ought not to be less than 220° F., and probably a temperature of 250° F. is desirable." Dr. Ransom of Nottingham used a temperature of 235° F. to 255° F. Dr. Henry of Manchester employed a temperature of 212° F., sustained for one hour. Mr. Wynter Blyth, in his "Dictionary of Hygiene," referring to some experiments in Hungary, states: "A temperature of 278° F. considerably retards decomposition, but certain forms of bacteria cannot be destroyed by it." Dr. Esse of Berlin uses a steam chamber with a pressure of two atmospheres and a temperature of 234° F., and Mr. Lyon of this country has invented a machine which will attain a temperature of 324°, with pressure of 40 lb. to the square inch. It is probable that a moist is more potent than a dry heat, but it must be employed considerably above boiling point. Prof. Tyndall, in experiments upon floating matter in the air, found that some fluids were not sterilised by continued boiling. It is probable, however, that an apparatus which gives a moist heat of 250° F. is effectual. The cost will seriously militate against the general use of high pressure disinfection. In large parishes a first cost of £300 might be met, but in many small parishes the expense would be sufficient to exclude this process.

With a view of finding a safe mode of disinfection, I made some experiments with a Harvey stove, a dry-heat stove already in use in the parish. Linen, calico, flock, and cotton articles became scorched and brittle at 255° F. and ignited at 380°; hemp and horsehair singed at 260° F. and ignited at 400°. At the time the ticks singed, the temperature in the centre of a feather pillow was only 180° F., that in a flock pillow 215°. In order to get a moist heat, six buckets of water were placed in the oven, and the heat raised to 300° F.; a feather and a flock pillow were then placed in the oven, and the heat gently raised until a thermometer lying on one of the pillows registered 340° F. The thermometer in the centre of the flock pillow stood at 280°, that in the feather pillow registered much less; but with this great heat there was no scorching or discolouration.

These experiments point to the unreliability of the dry-heat process; for at a temperature which one would consider insufficient for disinfecting, the material is singed and rendered useless. At the same time they suggest a remedy which is easy of application and inexpensive. The employment of a steam jet or a few buckets of water in the stove places a thoroughly effective process in the hands of those who already have the dry-heat arrangement at command.

In conclusion, I would say that the systematic use of the thermometer should be considered an essential part in the process of disinfection, upon which the health of the community so much depends, and that this important duty should not be entrusted without definite regulations to unskilful hands.

I am, Sir, your obedient servant,
H. WALTER VERDON, M.D., F.R.C.S.,
Dec., 1883. Medical Officer of Health, Lambeth.

REGULATION OF DAIRIES.

To the Editor of THE LANCET.

SIR,—I send you herewith a copy of a memorial which I have this day forwarded to the President of the Local Government Board. I am, Sir, yours sincerely,

Manchester, Jan. 14th, 1884. FRANCIS VACHER.

To the Right Honourable Charles Wentworth Dilke, Bart., M.P., President of the Local Government Board.

The Memorial of the North-Western Association of Medical Officers of Health respectfully sheweth:

That your memorialists are a body of medical officers of health practising in the counties of Lancaster, Chester, Derby, and the West Riding of the county of York.

That your memorialists trust your Honourable Board will take steps that the Public Health (Dairies, &c.) Bill of 1883 be introduced in the approaching session of Parliament, and that on its introduction the following four clauses, or clauses to the same effect, may be added to the Bill:—

1. Any local authority may require all dairymen and milksellers trading as such within the authority's district to notify all cases of dangerous infectious disease appearing on their premises so soon as they shall be aware of the existence of the same, under a penalty for failing to notify not exceeding ten pounds.

2. Any local authority may on receiving such notification

at once close the infected premises till the removal or recovery of the infected subject, and the disinfection of the premises to the satisfaction of the authority.

3. Any local authority may forbid and prevent the sale of milk by milksellers or dairymen coming from without the authority's boundaries when there is reason to believe the milk comes from premises infected or otherwise unfit for dairy purposes.

4. Any local authority may require any dairyman or milkseller to furnish on application a list of the customers served by him on any day or days, and may, if they think fit, pay him for the same, and also to furnish on application such particulars as may be required of the source from whence he obtained his milk-supply on any day or days.

And your memorialists will ever pray.

Signed on behalf of the North-Western Association of Medical Officers of Health.

JOHN MAKINSON FOX, President.
FRANCIS VACHER, Hon. Sec.

SCOTTISH NOTES.

(From our own Correspondent.)

PERTH INFIRMARY.

FOR some time past, and indeed fitfully for some years, the profession in Perth have complained of what had become a monopoly in the medical attendance at the infirmary. About fifteen years since, in deference to a spirit similar to that now pervading the younger members, the directors appointed two gentlemen as visiting surgeons, on the understanding that they should retire after a stated number of years' service. The recent discontent is due to the fact that this agreement has not been carried out, and the infusion of fresh blood has up till now been impossible. The subject has at last found its way into the correspondence columns of a local paper; and it is now stated that Dr. Stirling has resigned office. This gentleman has taken a very active interest in all that concerned the infirmary for many years, was frequently in the confidence of the directors when changes were proposed, exercised a somewhat preponderating influence, and was generally regarded as chief of the staff. For some time Dr. Stirling's health has not been robust, and his extensive practice has been exacting. It is understood that Messrs. A. Barclay Calder, M.B., and Simpson, M.B, are avowed candidates for the vacant office. The former gentleman is Dr. Stirling's partner, has had the immense advantage of serving both as house-physician and house-surgeon in the Edinburgh Royal Infirmary, and is eminently qualified for the work; but Mr. Simpson also shows good testimonials, and his past success in securing appointments in Perth may again stand him in good stead. There may be another candidate before the election takes place. It is fortunate that the above amicable arrangement has been come to, as it will ensure for some time the valuable services of Dr. J. P. Bramwell as senior surgeon.

TESTIMONIAL TO MR. CAMPBELL.

Mr. Campbell, M.B. (Newport), having recently been appointed to a vacancy at Elie, was agreeably surprised at the manifestations of regard which his proposed removal evoked from the people of Newport. A hastily prepared address requesting Mr. Campbell to remain was taken round the town and signed by the leading inhabitants, and a few nights afterwards he was presented with the handsome testimonial of £300 and a beautiful gold watch. Mr. Campbell settled as an entire stranger in Newport about three years ago.

THE HABITS OF FOOD FISHES.

It appears that, besides the inquiries to be made by Professor M'Intosh on behalf of the Trawling Commissioners, formerly mentioned in these notes, he has arranged to carry on experiments with the view of throwing some light on the habits and time of spawning of the various flat fish. Professor M'Intosh will be supplied with tanks and other appliances for work in St. Andrew's Bay. Along the coast and at different stations fish other than of the flat variety will have attention; and in carrying out the work the Fishery Board seems to have secured the assistance of the best of our biologists. Already Professors Cossar Ewart, M'Intosh, Stirling, M'Kendrick, and Schafer are engaged in different branches of the inquiry, which is expected to have distinct value in indicating the best methods of artificial cultivation for those fishes which are now scarce and dear.

THE DUNDEE WHALE.

For more than a week a monster from the northern seas succeeded, through sporting himself in the Tay, in baffling the efforts of the united whale fleet of Dundee; but ultimately he was so hacked and wounded and cruelly treated that he died at sea and was towed into Stonehaven. A spirited fight for possession then took place between Prof. Struthers, in the interests of the Aberdeen University, and a showman from Dundee, who had to pay £226 to secure the carcase. The whale has been taken back to Dundee for exhibition, and he is as anxiously watched now by contending scientists as he was before by the harpooners. The skeleton is eagerly sought for different museums, but after the zeal shown by Prof. Struthers we may be pretty sure it will go north.

DEATH OF DR. THOMAS B. HOWIE (MACDUFF).

I regret to record the death, at the early age of thirty years, of one for whom his friends anticipated a long and useful career. Dr. Howie died at his father's house in Alyth on Friday last, after sufferings which had extended over more than a year, and had included attacks of jaundice and dropsy. Graduating in Glasgow in 1875 as M.B. and C.M., he subsequently obtained his M.D. After acting as an assistant in the north of England, Dr. Howie obtained a practice at Methven, in Perthshire, but in a short time he removed to Macduff, in Banffshire, where he met with considerable success. He was pre-deceased by a young wife, and leaves two children.

IRELAND.

(From our own Correspondent.)

THE seventh annual general meeting of the Dublin Branch of the British Medical Association will be held at the College of Physicians on Thursday, the 31st inst., when the officers and council for the ensuing year will be elected. Mr. Edward Hamilton, surgeon to Steevens's Hospital, an ex-president of the Royal College of Surgeons, and the President elect, will deliver the annual address.

THE PHARMACY ACT.

The Chief Secretary for Ireland last week received a deputation from the Council of the Pharmaceutical Society of Ireland, who asked for certain amendments of the Pharmacy Act of 1875 in reference to the sale of poisons in Ireland. It was shown that in the greater part of Ireland at present the Sale of Poisons Act was a dead letter; for in small country towns and villages lethal drugs were sold by hucksters, grocers, stationers, and others. Until the passing of the Act of 1875 chemists and druggists had the right of retailing poisons, but they could not compound medicines. Such chemists and druggists as were in existence at the time were allowed to continue in business, but were obliged to pass an examination. By section 31 such persons had reserved to them the right to continue to sell poisons without any examination, but no machinery was created whereby such persons should be registered. It was desirable that the Pharmaceutical Society should possess the power to register these persons. The question was whether such a grade of men should be allowed to continue, but the Council by a majority thought that "it would be in the interest of the public that in future all persons should be licensed to sell poisons only on passing a moderate examination, whom it was proposed to call registered druggists." Further, the Council desired certain words in the Act to be made more specific, to prevent what at present existed—namely, that a qualified man and an unqualified man could carry on business jointly, while an unqualified man could not carry on business alone. A member of the deputation expressed his dissatisfaction with the results of the Act, and with the average number of licentiates of the Pharmaceutical Society. Last year the number admitted was nineteen, and the previous year fifteen. The chief secretary said he would, unless he heard any counter arguments, do all in his power to promote their wishes, but it would be quite impossible to bring forward in Parliament any opposed Bill on Irish matters early in the session with any chance of its passing.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BELFAST.

The first annual meeting of the subscribers to this institution was held last week. The report of the medical staff for the past year showed that the cases treated amounted to 331, and included patients suffering from consumption, bronchitis, asthma, &c. Of 126 cases of consumption, in fifteen the disease was arrested; but in the greater number of patients suffering from this affection the disease had advanced too far to hope for more than alleviation. Consumption is a disease very prevalent in Belfast, and for many years its steady increase has been a subject of considerable anxiety. The conditions under which the linen trade is so largely carried on in Belfast, and the dampness of the place, appear to be important factors in the large increase of cases of chest diseases. In the Ballymacarrett district alone the number of deaths for the past year from this cause amounted to upwards of 300.

ST. KEVIN'S CHURCHYARD, DUBLIN.

Dr. MacCabe, Local Government Board Inspector, held an inquiry last week, on the application of the Public Health Committee, to have this graveyard closed against further interments, on the ground that it was overcrowded, and was a source of danger to the health of those residing in the locality. Evidence in favour of closing the graveyard was given by Drs. Cameron and Mapother, and, the inquiry having concluded, Dr. MacCabe will in due course forward a report to the Local Government Board.

An election for a medical officer to the Ballineen Dispensary took place last week, but there having been recorded an equal number of votes for Messrs. Neville and Leirs, a fresh election will have to take place.

Mrs. Stoney has given a donation to the City of Dublin Hospital of a number of ophthalmic instruments, the property of her husband, the late Dr. Loftie Stoney, ophthalmic surgeon to the hospital.

Dr. O'Connor, medical officer of the Limerick Workhouse, has sent in his resignation. There are already five candidates in the field for the vacancy.

Dublin, Jan. 15th, 1884.

PARIS.

(From our Paris Correspondent.)

DRAMATIC PERFORMANCE IN AID OF HOSPITAL FUNDS.

A RATHER novel means of raising money for benevolent purposes was tried at the Hôpital Saint Louis on Saturday last. The internes of the hospital got up an amateur "opera bouffe" in three acts, accompanied with appropriate scenery, and composed by themselves, for the benefit of the patients of the hospital. The performance took place in the new pavilion that was lately annexed to the institution, in the presence of about 400 persons. The troupe included some of the first artistes of Paris, as well as amateur performers selected from among the internes of the hospital. The piece was entitled "Louis IX., Opéra polymorphe," and was well arranged, the performance being wound up by a ballet, followed by an apotheosis representing different categories of patients. The affair was a great success, and no less than 7000 francs were realised on the occasion.

PROFESSOR DAMASCHINO.

A banquet was given on Friday last to Prof. Damaschino by his friends and pupils, on the occasion of his recent nomination to the Professorship of Medical Pathology at the Paris School of Medicine. The banquet was presided over by Prof. Gavarret, the guest of the evening being on his right, and Senator Bardou, former Minister of Public Instruction, on his left. Appropriate toasts were proposed and responded to, and everything passed off in the most cordial manner.

HONOURS TO MEMBERS OF THE FRENCH CHOLERA MISSION.

Dr. Straus, agrégé of the Faculty of Medicine, and Dr. Nocard, Professor of the Veterinary School at Alfort, have been nominated Chevaliers of the Legion of Honour for their zeal and for the service they have rendered to science during their mission to Egypt to study the etiology of cholera.

M. Frémy, Professor of Chemistry at the Museum of Natural History, who had been already superannuated, has been allowed by the Minister of Public Instruction to retain office for another period of five years.

Paris, Jan. 15th, 1884.

INDIA.

(From a Correspondent.)

THE GERMAN CHOLERA COMMISSION.

THIS, with Dr. von Koch as the chief, was to have landed in Bombay about the middle of November last (and I proceeded to Bombay to meet it, and to watch its proceedings), but as there was no cholera in Bombay Dr. Koch and his colleagues went to Calcutta by sea direct. The *Indian Medical Gazette* (Dec.) says that Dr. Koch and his commission are coming straight to Calcutta. Of course every facility will be offered them for prosecuting their researches in the home of cholera.

THE ST. JOHN AMBULANCE ASSOCIATION.

Dr. Balfour of Bombay, to whom is due the credit of setting this movement on foot, and under whom ambulance classes are now being held there, has issued a Maharatta translation of Prof. Esmarch's "First Aid to the Injured," which he has, with permission, dedicated to Sir James Fergusson, Governor of Bombay.

THE MEDICAL SOCIETY OF BOMBAY.

A monthly meeting of this Society was held in the University Hall in Bombay on Nov. 7th last, the chair being occupied by Dr. Vandyke Carter. Notes of a "Case of Intussusception, with Remarks," were read by Dr. Lucas; and a paper on "The Value of Kairin," by Dr. Kirtikar. In the discussion which followed some very interesting and instructive remarks fell from the chairman.

AN ASSISTANT HEALTH OFFICER FOR BOMBAY.

At the instance of Dr. Blanc, member of the Municipal Corporation, the Assistant Health Officership of Bombay, which was formerly held by a layman, is now divided into two posts, the holder of one of which must be a medical man. The salary for these appointments is to be four hundred rupees per mensem, rising in course of years to six hundred rupees. In consequence of the small pay it is very unlikely that any member of the Indian Medical Service will offer himself as a candidate, and therefore it will probably go to a native local medical graduate. It would seem a pity that the corporation should not be brought to think it essential to offer a decent remuneration to obtain the services of some member of the Indian Service well up in hygiene and sanitary engineering. The special training and education of the school at Netley, it would seem, are not availed of to secure a competent colleague for the hard-worked health officer, Dr. Weir. It is to be hoped that the matter will receive reconsideration, and that it will be made worth the while of a good and able man to seek the post, and to devote his whole time and full energy to the sanitation of such an immense city as Bombay. It must be remembered that the assistant health officer would by virtue of the experience gained, and provided he be an accomplished and hard-working sanitarian, be the fittest man to succeed, either temporarily or permanently, to the higher office. It would be well perhaps for the authorities to do away with the office of lay assistant health officer; by this means funds would become available to offer the necessary inducement to an Indian medical officer.

DR. CORNISH, CIVIL SURGEON-GENERAL, AS MEMBER OF THE LEGISLATIVE COUNCIL OF THE GOVERNOR OF MADRAS.

The *Madras Mail* thus remarks on this new appointment:—"The appointment comes with peculiarly good grace from the grandson of that Sir Whitelaw Ainslie, M.D., who was upwards of half a century ago head of the Madras Medical Department, and the Council will be strengthened in public estimation by the presence at its meetings of a well-known and much-respected public officer, who has given abundant proof of talent, honesty, and independence. At long intervals and in a very grudging manner, Companionships of the Bath, the Star of India, and the Indian Empire have been bestowed upon military doctors, but there is no

instance on record of the Indian knighthood having been conferred on an Indian doctor. Mr. Grant Duff has now established a precedent which may set other Governors thinking that a man who is a competent surgeon-general may also prove a competent legislator. The Madras Medical Service cannot fail to appreciate as a personal and departmental compliment the unique honour that has been conferred on the Hon. the Surgeon-General."

THE BANGALORE MURDER.

A couple of months ago a brutal outrage was perpetrated at Bangalore on a European woman in the streets at night. The form of murder is as revolting as it is peculiarly Oriental. A stick—presumably a walking-stick—was violently thrust into the vagina, thereby rupturing not only the parts about the organs of generation, but also the more vital parts, the viscera; the cause of death being hæmorrhage. It is believed that the dastardly culprits were natives (Mahomedans), but no trace of them has been brought to light.

MEDICAL "LOG" OF A VOYAGE OF AN EMIGRANT SHIP.

(By a Correspondent.)

FOR some years past an extensive emigration has been carried on between the Azores and the Sandwich Islands owing to the failure of the orange crops in the former. On Aug. 30th last the steamship *Bell Rock* sailed from St. Michael's with 1465 Portuguese emigrants, under the medical charge of Dr. C. C. Fitzsimon, arriving at Honolulu on Oct. 31st, the distance run being nearly 13,000 miles. The utmost attention to sanitary arrangements was observed throughout the voyage, and perfect order and discipline maintained. The provisons were excellent; the diet scale liberal; and 2000 gallons of water were condensed daily. All those unvaccinated were vaccinated as soon as possible after arrival on board. Of the 1465 emigrants 564 were children, whose ages averaged from four days to twelve years. A large proportion were infants under one year, these, as a rule, being very puny and delicate. It was noted afterwards that nearly all the children were literally infested with round worms. Ten days after leaving St. Michael's a case of measles broke out, followed twelve days later on by another; in all 49 cases occurred, and the average period of incubation was found to be eleven days. Several of the cases were complicated with severe attacks of bronchitis and pneumonia. There were, however, no deaths. Five children were born during the voyage. Five deaths were also registered: one old man, aged sixty-seven, from chronic peritonitis; and four infants (under one year), two from marasmus, one from diarrhœa, and one from a tumour in the brain. The following is a list of the principal diseases that occurred during the voyage, exclusive of sea-sickness:—Abscess (all kinds), 28; ulcers, 18; wounds, 9; contusions, 12; sprains, 4; whitlow, 4; boils, 18; simple erythemata, 12; erysipelas, 3; urticaria, 5; lichen tropicus, 28; eczema, 14; ringworm, 26; measles 49; febricula, 6; rheumatism (muscular), 10; epilepsy, 1; convulsions, 5; hysteria, 6; marasmus, 4; general debility, 8; anæmia, 5; secondary syphilis, 4; bubo, 5; gonorrhœa, 6; orchitis, 3; paraphimosis, 2; hydrocele, 3; laryngitis, 1; pharyngitis, 2; tonsillitis, 8; phthisis, 3; pneumonia (acute), 8; bronchitis, 18; pleuro-pneumonia, 3; burns and scalds, 14; fracture of femur, 1; miscarriage, 2; menorrhagia, 4; bursitis of knee, 1; tumour of brain, 1; obstruction of bowels, 1; rickets, 1; cyst of neck, 3; goitre, 1; hip disease, 1; neuralgia, 5; conjunctivitis (catarrhal and purulent), 21.

On arrival at Honolulu, the medical officer was presented with a handsome testimonial by the emigrants, and was also warmly congratulated by the authorities on the exceptionally low mortality. His majesty King Kalakua also visited the steamer, and expressed himself well satisfied with the arrangements.

UNIVERSITY OF CAMBRIDGE.—The Special Board for Medicine have issued for the guidance of students proceeding to medical and surgical degrees a schedule defining the range of the examination in Pharmacy and Pharmaceutical Chemistry, copies of which may be obtained at the Anatomical Schools.

Obituary.

WILLIAM FASKEN, M.D., R.N.,

DEPUTY INSPECTOR-GENERAL, RETIRED LIST.

DR. FASKEN was born in 1819 at Madras, the son of W. Fasken, M.D., Madras Artillery, which service he entered after the peace with France, having served nine years with the Peninsular Army. The subject of our notice was educated at Udney Academy, Aberdeenshire, under Dr. Bissitt, and proceeded to Marischal College, Aberdeen, where he obtained a bursary for five years for his proficiency in the classics. He then went to the University of Edinburgh, at which he took a high position in the medical classes, and passed for surgeon in 1840, and took the degree of M.D. in 1841. Continuing his medical studies two years he then entered the Royal Navy, in 1843, and was promoted to surgeon's rank in 1859, to staff-surgeon 1866, to fleet surgeon 1872, and to Deputy Inspector-General, on retirement, in 1875. His career had been retarded by retrospective Orders in Council affecting prejudicially the appointment he was holding. Dr. Fasken's first appointment was to the West Indian station, the home of yellow fever, where he completed two years, which made him familiar with that scourge of our seamen. On his return he was rewarded with six months' service at Plymouth Hospital, from which he was appointed to H.M.S. *Bellerophon*, in the Mediterranean, and was senior assistant surgeon of her during the alarming visitation of the cholera to the fleet in 1850, by which his ship was one of the principal sufferers. For his conspicuous service on that occasion he was appointed to the Royal Marines and Melville Hospital at Chatham, where he served nine years. On leaving there he went to the Australian station as surgeon of the *Fawn*, and was subsequently staff-surgeon of the *Terrible* and fleet surgeon of the *Monarch*, and finally the chief medical officer of Portsmouth Yard until his final retirement.

In every position Dr. Fasken was respected for his attainments and beloved for his urbanity, and, above all, for his unwearying attentions to the wants and best interests of the sick under his charge, towards whom he displayed the higher qualifications of the truly Christian character with which he was endowed. Through many years his physical power was enfeebled by a painful articular affection, which, however, in no wise caused him to defer or depute his personal duties. Among his testimonials he valued none so highly as an illuminated one, accompanying a salver, tea and coffee service, and a clock, presented by the artificers and police of H.M. Dockyard at Portsmouth on the expiration of his term of service in medical charge.

Dr. Fasken leaves two representatives in the profession he loved so much, the elder a surgeon-major in the Indian service, who feel deeply their bereavement of so worthy and respected a guide and exemplar, who was called away on Oct. 11th, 1883.

THE ROGERS TESTIMONIAL.

To the Editor of THE LANCET.

SIR,—Will you kindly insert the enclosed eleventh list of subscriptions in this week's LANCET, and oblige, yours truly,

J. WICKHAM BARNES.

Poor-law Medical Officers' Association, 3, Bolt-court, Fleet-street, London, Jan. 8th, 1884.

J. Norton, Esq., John-st., Bedford-row, £2 2s.; Dr. Henry Drinkwater, Sunderland, £1 1s.; Dr. Montague Thomas, Nottingham-place, Regent's-park, £1 1s.; City of London Infirmary, £1 1s.; F. Sadd, Esq., Rugby, £1 1s.; Dr. Irvine Milne, Shipdham, Norfolk, £1 1s.; Dr. Milsome, Addlestone, 10s. 6d.; Dr. Robert Tiffen, Wigton, 10s. 6d.; Dr. Lush, Fyfield, Andover, 10s. 6d.; E. Snell, Esq., Ketton, Stamford, 10s.; Dr. Turtle, Woodford, 10s; W. Moore, Esq., Stourport, 10s.; Dr. Nicholas, Church-row, Wandsworth, 10s.; George Harrison, Esq., Whitefriars, Chester, 5s.; C. Read, Esq., Stradbroke, 5s.; Dr. T. J. Hughes, Woolwich, 5s.; Dr. R. T. Jones, Harlech, 5s.; Dr. E. T. Thompson, Wolston, Coventry, 5s.; W. Arras, Esq., Wetheral, 5s.; H. Horton, Esq., Bromyard, Worcester, 5s.

HOSPITAL SUNDAY IN LIVERPOOL.—The collection for hospitals in Liverpool was taken last Sunday. It is too soon to estimate the result.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — At a meeting of the Council on the 10th inst. the following Member was elected a Fellow of the College:—

Brownless, Anthony Collings (M.R.C.S., March 1841), Vice-Chancellor of the University of Melbourne.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 10th, 11th, 14th, 15th, and 16th inst.:—

Percy Rose, F. W. Tartle, W. P. Le Feuvre, P. T. Adams, S. Bueno de Mesquita, A. A. Smith, E. M. Hearden, and W. S. Brown, Guy's Hospital; P. E. Barber, Cambridge and St. Bartholomew's Hospital; E. S. Smith, St. Mary's Hospital; E. A. Lubbock, London Hospital; John Cotton, Liverpool; Archibald Thomas, Middlesex Hospital; W. H. Beaumont, Cambridge; G. H. Spencer and Henry Gell, Owens College; F. C. Goodwin, A. L. Castel, J. H. Yolland, G. T. Bates, T. W. P. Lawrence, R. R. Pearse, and H. G. Henderson, University College; G. H. Whitaker, A. E. Vidler, Alfred Wright, J. Muriel, C. A. Griffith, S. Beauchamp, and J. S. W. E. Sharman, St. Bartholomew's Hospital; C. T. Green, G. E. Fitzgerald, and G. Michelmore, St. George's Hospital; J. A. Bratton, V. G. Thorpe, H. Yeo, and E. V. Pegge, King's College; W. A. Evelyn, Cambridge and St. Thomas's Hospital; A. E. Clarke, Leeds and St. George's Hospital; F. J. P. Smith, G. W. Ord, and H. M. Bullock, St. Thomas's Hospital; H. E. Herris, Cambridge and St. Bartholomew's Hospital; A. A. McAnally, King's College; W. W. Grosvenor, F. A. Harger, F. W. Nielson, and T. G. Davey, St. Bartholomew's Hospital; R. A. Freeman, Middlesex Hospital; F. W. Farr and G. T. Rawnsley, Guy's Hospital; E. V. Phillips, St. Thomas's Hospital; P. J. Pugh and T. H. Williams, University College; J. J. Oakman, Westminster Hospital; W. A. R. Braybrooke, St. George's Hospital; A. T. Wooldridge, W. F. Fisher, F. L. P. Sawell, and R. G. Cookson, St. Bartholomew's Hospital; J. P. Nassau, E. R. M. C. R. Cousins, A. H. P. Shaw, J. M. Jones, and F. F. L. Penno, University College; J. E. Ker and H. Gurney, St. Thomas's Hospital; E. G. Lumsden and E. A. Burnside, King's College; N. J. N. Bray, Guy's Hospital; F. G. C. Martin, London Hospital; W. T. Wallington, Charing-cross Hospital.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Jan. 10th:—

Evers, Chas. Henry, Choppington-street, Newcastle-on-Tyne.
Hunter, Geo. Douglas, Caroline-street, Eaton-square.
Martin, H. Joseph Walklate, Twyford House, St. Albans.
Spring, John, Bell-street, Darlaston.
Williamson, Richard Thomas, Caerden-terrace, Barnley.

The following gentleman also on the same day passed the Primary Professional Examination:—

Hopkins, John Walter, Leeds School of Medicine.

At the Preliminary Examination in Arts, held at the Hall on Jan 10th, 11th, and 12th, 77 candidates presented themselves, of whom 47 were rejected, and the following 30 passed:—

SECOND DIVISION (alphabetical order).—William Ashby, Ernest S. T. Badger, *J. Elford Bailey, W. R. M. Berridge, John Beyts, S. R. Blake, *Ernest Burchell, J. T. Clapham, *T. F. Clemson, *John Charles Coulton, R. S. Freeland, R. H. French, P. A. Gore, *Francis Percival Harris, G. S. Owen Howes, *W. Edward Jones, *Henry Layng, *J. R. McMahon, Charles Meaden, W. K. Parbury, R. E. F. Pearse, H. Richardson, S. A. Rowley, D. C. S. Simmonds, Cecil Willard Smith, *Henry Smith, *E. R. Streeten, W. D. Wells, *E. T. Whitaker, J. Edward Williams.
*Also passed in Elementary Mechanics.

THE HOSPITALS ASSOCIATION.—The inaugural meeting of the Association will be held at the Mansion House on the 1st of February, under the presidency of the Lord Mayor.

BY the will of the late Sir W. Siemens, the German Hospital receives £2000, and the Tunbridge Wells Infirmary £1000.

PARKES MUSEUM.—At a meeting of the Council held on Jan. 8th, Dr. G. V. Poore in the chair, the following gentlemen were duly elected members:—Sir James Paget, Bart., D.C.L., F.R.S.; H. A. Darbishire, F.R.I.B.A.

THE Derby Town Council has resolved to erect a new lunatic asylum on the site of forty-two acres, known as the Rowditch Estate. The land is valued at £400 per acre, and the building is estimated to cost £30,000.

EAST LONDON HOSPITAL FOR CHILDREN.—The annual treat to the little patients in this hospital took place on Monday. About forty of the seventy-nine children at present under treatment were able to be present, and a hundred others who had been inmates last year were also invited. The institution is in need of the funds requisite to make the out-patient department available for the medical relief of the numerous applicants that crowd the doors.

TUBERCULOSIS AMONGST CATTLE IN VICTORIA.—Professor Allen, Dr. Jameson, Dr. Plummer, and Mr. Buchanan, M.L.C., of Victoria, have been appointed members of a board to inquire into the spread of tuberculosis amongst cattle in the colony.

THE Society of Arts has received £1200 for distribution in prizes for essays upon the building of dwellings for the poor of the metropolis and for plans for the reconstruction of Central London. The award for the former will amount to £250, and for the latter there will be one of £500 and three of £150 each.

A WISH FULFILLED.—A few days since, it is stated, a private in the Hampshire Regiment at Gosport called upon the Almighty to strike him blind. A little while afterwards he felt drowsy, and threw himself on a bed. On trying to open his eyes he could not do so, and he is now under treatment in the Haslar Military Hospital, not having recovered his sight.

PORTSMOUTH ROYAL HOSPITAL. — At the annual meeting of the subscribers to this institution on the 15th instant a deficit of over £600 on the year's accounts was announced. It was stated that this was mainly due to the reduction in the grant by the Admiralty for the Lock wards. The grant in 1882 was £3770, but in 1883 it was only £2207, owing to t he suspension of the Contagious Diseases Act.

MORTLAKE MAIN DRAINAGE.—A special meeting of the Lower Thames Valley Main Sewerage Board was held at Kingston on the 12th inst., for the purpose of preparing to meet the opposition, which has been formally notified, to the carrying out of the proposed main drainage works at Mortlake. It was decided that the matter should be referred to the Works and Parliamentary Committee, to take such steps as they might think fit to support the application to the Local Government Board for a provisional order.

TESTIMONIALS.—At Christ Church Vicarage, Ealing, on the 5 h inst., the Rev. J. S. Hilliard, on behalf of the subscribers, presented Mr. Thomas Ridley Bailey, M.B. &c., with a handsome French marble clock and a pair of side ornaments, bearing the following inscription:—"Presented to Thomas Ridley Bailey, Esq., M.B., C.M.Ed., by a few of his patients at Ealing, to mark their appreciation of his kindness and attention. January, 1884."—Mr. H. G. Darwin, M.R.C.P. &c., of Manchester, has been presented by patients in his late practice with a large box of surgical instruments as a token of their esteem.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting held on Thursday, January 10th, the following list of officers, Council, and Microscopical Committee was adopted:—President: Dr. Gee. Vice-Presidents: Dr. W. Macfie Campbell, Mr. Rushton Parker, Dr. J. H. Wilson, Dr. J. Wallace. Honorary Treasurer: Dr James Barr. Honorary General Secretary: Dr. F. Pollard. Honorary Secretary of ordinary meetings: Mr. F. T. Paul. Honorary Librarian: Dr. Burton. Council: Dr. Alexander, Dr. Archer, Dr. Carter, Dr. T. Clarke, Dr. Glynn, Dr. Grimes, Dr. Imlach, Mr. McCheane, Dr. R. F. Owen, Mr. R. N. Pughe, Mr. T. Shadford Walker, Dr. Young. Microscopical Committee: Dr. Alexander, Dr. Braidwood, Dr. Briggs, Dr. Glynn, Dr. Grossmann, Dr. Hicks, Dr. McClelland, Mr. Newton, Mr. Rushton Parker, Mr. F. S. Paul, Dr. Rich, Dr. Whitford, Dr. W. Williams.

FINSBURY DISPENSARY.—The biennial festival of this old-established dispensary was celebrated on Monday evening at the Holborn Restaurant, under the presidency of the Lord Mayor, supported by the Sheriffs of London and Middlesex. From the 104th annual report, which was circulated during the evening, it appears that the number of new patients in the year 1883 amounted to 13,719, which exceeds by 944 that of the previous year, and is the largest number yet relieved in any one year by this dispensary. The attendances amounted to 32,619; the number of visits by the medical officers to patients at their own homes was 3570, making a total of no less than 36,382 consultations in the year. All this hard professional work was done by the two physicians to the institution—Dr. J. W. Griffith, M.R.C.P., and Dr. W. Domett Stone, F.R.C.S., assisted by the resident medical officer, Mr. Alfred Phillips. During the evening subscriptions to the amount of £510 were received.

THE BOWER AND KEATES CASE.

THE following is the sixth list of contributions, being those received up to the 12th instant:—

W. Adams, F.R.C.S. £6 6s.; H. W. Acland, C.B., F.R.S., £5; G. B. Brodie, M.D., £3 3s.; J. Jones, F.R.C.S., £3 3s.

The following have sent two guineas each:—

W. Bucknill, Esq.; W. O. Chalk, Esq.; A. Cooper, F.R.C.S.; F. B. Courtenay, Esq.; T. H. Forshall, Esq.; J. W. Gooch, Esq.; C. J. Hare, M.D.; T. S. Howell, Esq.; T. W. C. Jones, F.R.C.S.; G. Lawson, F.R.C.S.; C. H. F. Routh, M.D.; Buxton Shillitoe, F.R.C.S.; A. Winkfield, F.R.C.S.

The following have sent one guinea each:—

J. Allen, M.D.; T. R. Armitage, M.D.; A. W. Barclay, Esq.; R. Barlow, Esq.; W. H. Bennett, F.R.C.S.; H. Briggs, M.D.; R. C. Brown, M.B.; J. G. Carruthers, Esq.; R. R. Cheyne, F.R.C.S.; J. Fenn Clark, Esq.; W. M. Coates, F.R.C.S.; Alex. Collie, M.D.; C. E. Collins, Esq.; A. W. Crane, Esq.; R. S. Cross, Esq.; F. R. Cruise, Esq.; W. D. Cusens, Esq.; W. E. Dixon, F.R.C.S.; E. R. Evans, Esq.; D. Everett, F.R.C.S.; D. Ferrier, M.D., F.R.S.; W. Gaudy, Esq.; R. Gilbertson, Esq.; W. Gill, Esq.; R. J. Godlee, F.R.C.S.; Stanley Haynes, M.D.; W. A. Hearnden, M.D.; T. Wood Hill, Esq.; J. S. Hosford, M.D.; T. Mark Hovell, F.R.C.S.; W. H. A. Jacobson, M.B.; W. Johnson, M.B.; Bernard Kendall, Esq.; G. Leake, Esq., Surgeon-Major; W. J. H. Lush, M.D.; J. A. McDonagh, F.R.C.S.; A. C. MacLaren, Esq.; T. May, Esq.; H. Monro, M.D.; Gawin Orr, M.D.; W. Pollard, F.R.C.S.; W. Rayner, Esq.; H. S. Renshaw, M.D.; J. Reynolds, M.D.; B. Rix, Esq.; F. G. Sadd, Esq.; E. Selous, M.D.; W. Johnson Smith, F.R.C.S.; E. M. Swanwick, Esq.; C. J. Symonds, F.R.C.S.; H. P. Trusell, M.B.; F. Vacher, Esq.; C. Welch, Esq.; J. C. Whaley, Esq.

The following have sent one pound each:—

J. Chiene, F.R.C.S.; T. P. P. Marsh, M.D.; G. Waylin, Esq.; W. S. Wyman, M.D.; F. L. Selous, Esq.

The following have sent ten shillings and sixpence each:—

Boughton Addy, M.D.; R. Anderson, M.D.; C. T. Aveling, M.D.; — — Back, M.D.; M. S. Bennett, Esq.; J. G. Bredin, Esq.; T. M. Butler, Esq.; Isaac Byerley, F.R.C.S.; J. Carrie, Esq.; A. Cunningham, M.B.; T. Chapman, Esq.; E. Diver, M.D.; Woodfield Eagles, Esq.; J. E. Eddison, M.D.; J. Grove, M.D.; D. Holmes, M.B.; C. Hooper, Esq.; A. P. Leak, M.D.; Hector Leak, Esq.; C. F. Lewis, Esq.; C. H. Lister, M.D.; Messrs. Morgan and Williams; J. Morton, M.B.; A. A. Napper, Esq.; Albert Napper, Esq.; H. G. Rawdon, M.D.; J. H. Russell, Esq.; F. R. Russell, M.D.; G. E. Scholefield, M.B.; C. J. Sells, Esq.; J. R. Stedman, M.D.; T. C. Temple, Esq.; T. W. Thompson, Esq.; J. B. White, Esq.; A. Whitehead, Esq.; R. Wilson Wilcox, Esq.; J. C. Wilkinson, Esq.

The following have sent ten shillings each:—

W. Alexander, M.D.; G. W. Armstrong, Esq.; E. G. Barnes, M.D.; T. W. Coffin, F.R.C.S.; F. Corbett, Esq.; S. D. Darbishire, M.D.; Theodore Davis, Esq.; T. Elliott, M.D.; J. R. Ferguson, M.B.; Adam Fletcher, M.D.; E. Furley, M.D.; G. P. Gold-smith, M.D.; W. Griggs, Esq.; George Harding, Esq.; H. Nelson Hardy, F.R.C.S.; A. Hensman, F.R.C.S.; A. Hepburn, Esq.; T. Joyce, M.D.; R. H. Kinsey, Esq.; C. Lucas, Esq.; H. A. Lawton, Esq.; T. Limbery, Esq.; R. Macartney, Esq.; P. Macpherson, M.D.; W. K. Manfold, Esq.; G. P. May, M.D.; W. W. Miller, M.D.; Ivor Murray, M.D.; H. Muscroft, M.D.; F. Needham, M.D.; F. Payton, Esq.; C. E. Perry, M.D.; F. G. Stevens, Esq.; T. S. Tellet, Esq.; E. Thompson, M.B.; F. Turtle, M.D.; Thos. Watts, Esq.; A. D. Webster, M.D.; G. F. West; G. J. Willan, Esq.; J. Young.

The following have sent five shillings each:—

J. A. Aldridge, M.D.; T. G. Allen, Esq.; Saml. Arnott, Esq.; J. H. Bailes, Esq.; R. Bangar, M.D.; W. H. Blake, M.B.; J. Bridger, Esq.; F. Canton, Esq.; R. T. Poole Collyns, Esq.; R. Congreve, Esq.; W. G. Copestake, Esq.; R. Cox, M.D.; R. N. Day, Esq.; R. Debenham, Esq.; T. F. Edgeworth, Esq.; J. P. Edwards, Esq.; G. M. Evans, Esq.; W. Ewart, M.D.; W. Fairbanks, M.D.; A. P. Fiddian, M.B.; J. P. Gaunt, Esq.; S. Lawrence Gill, Esq.; C. B. Granger, Esq.; W. A. Groet, Esq.; A. Hamilton, F.R.C.S.; J. Hammersley, Esq.; T. Harper, Esq.; J. Hartley, Esq.; R. Harvey Hilliard, M.D.; A. A. Hogarth, M.B.; H. F. Holland, M.D.; W. Husband, M.D.; H. Talbot Higginson, M.D.; Chas. Irving, Esq.; Edwin Jacques, M.D.; R. Kirkland, M.B.; O. H. Kyle, M.B.; A. Langley, Esq.; H. Maturin, Esq.; Lysander Maybury, M.D.; R. Meir, M.D.; J. R. Neal, Esq.; W. J. Nelson, Esq.; Hill Norris, M.D.; R. Norris, M.D.; A. W. Orwin, M.D.; F. Craddock Palmer, Esq.; T. Pearse, M.D.; Jas. Ray, Esq.; J. Rodley, Esq.; H. P. Rowlands, Esq.; M. T. Sadler, M.D.; T. A. Sellar, M.B.; H. Simpson, M.D.; F. M. Gadde Smith, Esq.; J. Snowdon Smith, Esq.; G. Spotton, Esq.; N. D. Talpade, M.D.; H. C. Taylor, Esq.; E. B. Tench, Esq.; G. L. Thorne, J. Tunley, Esq.; W. E. W. Vaughan, Esq.; E. H. Vinas, M.D.; H. Waldo, M.D.; W. Whalley, M.D.; A. Woodforde, Esq.; Anonymous.

The following have sent two-and-sixpence each:—

G. T. Brostch, Esq.; T. Clarendon, M.B.; Geo. Crawford, M.D.; J. C. Clarke, M.B.; C. E. Hardyman, Esq.; E. Hargreaves, M.B.; A. Hooley, Esq.; J. King Kerr, M.D.; John Morgan, Esq.; W. F. Parmer, M.B.; C. B. Plowright, Esq.; W. J. W. Proffitt, Esq.; J. Reid, M.B.; G. N. Stathers, Esq.; E. Williams, Esq.; G. Malpin, M.D.

Other smaller sums have been received from:—

T. A. Alexander, M.B., 2s.; J. H. Comber, M.D., 1s.; A Very Poor Sympathiser, 1s.

It will greatly facilitate the work if all further signatures to the memorial be sent in without delay.

F. A. MAHOMED, R. W. BURNET, } Hon. Secs.

Erratum.—"H. T. Philpot," acknowledged last week, should be "H. J. Philpot."

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BLORE, ISAAC, M.B Lond., has been appointed Resident Medical Officer to the Leeds Fever Hospital.

CAMPBELL, COLIN GEORGE, L.K.Q.C.P.I., M.R.C.S., has been appointed Medical Officer in the Township, Saddleworth Union.

CARR, J. ALLEN, L.R.C.S.E., L.R.C.P.E., has been appointed Medical Officer and Public Vaccinator for the Kippax District of the Tadcaster Union, vice J. W. Oglesby, M.R.C.S., deceased.

DONALDSON, HENRY, M.R.C.S., L.S.A.Lond., has been appointed Surgeon to the Arrow Hospital, Province of Otago, New Zealand.

DOWD, CHARLES, M.R.C.S., has been appointed Medical Officer to the Thoraborough Hospital, Queensland.

GODSON, EDWIN, M.R.C.S., has been appointed Medical Superintendent of the Hospital for the Insane, Parramatta, New South Wales.

HANDFIELD-JONES, MONTAGUE, L.R.C.P.Lond., M.R.C.S., has been appointed Assistant-Physician to the Chelsea Hospital for Women.

HOLMAN, ROBERT COLGATE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the South Keighley District and Workhouse, Keighley Union.

JACKSON, CHARLES, L.R.C.P.Ed., has been appointed Medical Officer for the Rainton District of the Houghton-le-Spring Union.

KNAPTON, GEO., L.R.C.P.Ed. &c., has been appointed Medical Officer to Court St. Denys, Ancient Order of Foresters, Southampton, vice A. B. Ware, M.B.Ed., resigned.

LARDER, HERBERT, M.R.C.S., L.S.A.Lond., late Senior House-Physician to the Westminster Hospital, has been appointed Assistant Medical Officer to the St. Marylebone Infirmary, Notting-hill.

MERCES, JAMES, M.R.C.S., L.R.C.P.Lond., has been elected Resident Medical Officer to the Bath General or Mineral Water Hospital, vice Alex. R. Busby, M.R.C.S., resigned.

ROBERTS, HENRY W., M.R.C.S., L.S.A.Lond., has been appointed Divisional Surgeon to the Brockley Police Station.

ROBINSON, LEONARD, M.D., M.Ch.R.U.I., has been appointed Medical Officer to the Amherst Hospital, Victoria.

SCANLAN, ARTHUR DE COURCY, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital, vice Mr. Willoughby, resigned.

SHAW, JOHN ALEXANDER, M.R.C.S., L.S.A.Lond. (late House-Surgeon), has been appointed Registrar to the Victoria Hospital for Children, Queen's-road, Chelsea, vice B. N. Rake, M.B.Lond.

SPEIRS, WILLIAM, M.R.C.S., L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Certifying Factory Surgeon for the District of Cleator Moor, Cumberland, vice Dr. Syme, deceased.

Births, Marriages, and Deaths.

BIRTHS.

HARDWICK.—On the 10th inst., at The Limes, Needham Market, Suffolk, the wife of Fredk. S. Hardwick, M.D., of a son.

MILLER.—On the 10th inst., at 9, Rankeillor-street, Edinburgh, the wife of the late George Miller, M.D. St. And., L.R.C.S.Ed., of a son.

NASH.—On the 10th inst., at Lansdowne-road, W., the wife of Edmund Nash, M.D., of a son.

MARRIAGES.

BALFOUR—BALLOCH.—On the 9th inst., at Eamont Lodge, Dowanhill, Glasgow, Isaac Bayley Balfour, M.D., Sc.D., Regius Professor of Botany in the University of Glasgow, to Agnes Boyd, second daughter of Robert Balloch, Esq.

CÆSAR—JEFFERAY.—On the 12th inst., at St. Matthew's, Redhill, by the Rev. H. Brass, Vicar, Julius, youngest son of H. A. Cæsar, M.D.Ed., F.R.C.S.I., to Marie Catherine, daughter of Joseph Jefferay, of West Ham, Essex.

MILLER—RAM.—On the 8th inst., at St. Margaret's Church, Westminster, Surgeon-General J. R. Miller, M.D., late H.M. Bombay Army, to Frances Anne Jane, only surviving daughter of the late Rev. Canon and the Lady Jane Ram.

THANE—WILLIS.—On the 31st Oct., at St. Mark's Church, Darling Point, Philip Thornton Thane, L.R.C.P. Lond., M.R.C.S., L.S.A.Lond., fourth son of George Dancer Thane, M.D., of Montague-street, Russell-square, London, to Annie Flora, eldest daughter of James A. C. Willis, Esq., Atherfield, Darling Point, Sydney, N.S.W.

WILLIAMSON—KIDD.—On the 15th inst., at the Parish Church, Skipton-in-Craven, Richard Ernest Williamson, M.B., of Settle, to Edith Georgiana, second daughter of the Rev. Philip Chabert Kidd, Rector of Skipton.

DEATHS.

BEATTIE.—On the 6th inst., at Mentone, Alexander Beattie, M.D., late of H.E.I.C.S., and Porchester-terrace, London, last surviving son of the late P. Beattie, Esq., of Insch, Aberdeenshire.

NEVILL.—On the 11th inst., at Killelagh Rectory, Maghera, county Derry, William Nevill, M.B., of Dungannon, Ireland, aged 79.

PARSEY.—On the 13th inst., at Hatton, Wm. H. Parsey, M.D., Physician-Superintendent of the County Asylum.

SHAW.—On the 10th Nov., at Geelong, Foster Shaw, L.R.C.S.I., aged 74.

SHEARMAN.—On the 12th inst., at Davos Platz, Switzerland, Percy Edward Shearman, L.R.C.P.Lond., eldest son of the late Charles James Shearman, M.D.Lond., and grandson of the late Edward James Shearman, M.D., F.R.S., of Rotherham, Yorkshire, aged 28.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

VOLUME TIGHTLY BOU

BOOKS ETC. RECEIVED.

ALLEN, E. W., London.
Sir Lyon Playfair taken to pieces. Likewise Sir C. Dilke. By William White. pp. 174.

BAILLIÈRE, TINDALL, & COX, London.
Ventnor and the Undercliff in Chronic Pulmonary Disease. By J. M. Williamson, M.D. Edin.

BLACK, A. & C., Edinburgh.
Winter Resorts on the Riviera. By C. B. Black. pp. 280. With Maps.

CASSELL & Co., London.
Elements of Human Physiology. By Henry Power, M.B., F.R.C.S.Eng. pp. 389. With 47 Engravings.

CHURCHILL, J. & A., London.
Rupture of the Urinary Bladder. By Walter Rivington, F.R.C.S. Eng. pp. 160.
A Plea for the Cure of Rupture. By Joseph H. Warren, A.M., M.D. pp. 117.
The General Practitioner's Guide to Diseases and Injuries of the Eye and Eyelids. By L. H. Tosswill, B.A., M.B.Cantab. pp. 147.
Year-book of Pharmacy, 1883. pp. 614.
St. Thomas's Hospital Reports. Vol. XII. pp. 351. With Index I.—XII.
A Short Manual for Monthly Nurses. By C. J. Cullingworth, M.D.

KIMPTON, HENRY, London.
The Medical Annual and Practitioner's Index, 1883-4. pp. 305.

LEA'S SON & Co., Philadelphia; KIMPTON, London.
A System of Human Anatomy. By Harrison Allen, M.D. Sect. V.: Nervous System.

LEWIS, H. K., London.
The Extra Pharmacopœia of Unofficial Drugs &c. By W. Martindale, F.C.S. Second Edition. pp. 330.

LIPPINCOTT, J. B., Philadelphia.
The Principles and Practice of Surgery. By D. Hayes Agnew, M.D., LL.D. Vol. III. pp. 784. Profusely Illustrated.
The Roller Bandage. By Wm. B. Hopkins, M.D. pp. 95. With 73 Illustrations.
Insanity considered in its Medico-legal Relations. By T. R. Buckham, M.D. pp. 265.

LONGMANS, GREEN, & Co., London.
Red Deer. By Richard Jefferies. pp. 206.

MACMILLAN & Co., London.
Life History Album. Record of Family Faculties. By Francis Galton, F.R.S.

RENSHAW, H., London.
Elements of Pharmacy, Materia Medica, and Therapeutics. By William Whitla, M.D. Second Edition. pp. 602. With Lithographs and Woodcuts.

SCRIBNER'S SONS, New York.
Where did Life Begin? By G. Hilton Scribner. pp. 59.

STOCK, ELLIOT, London.
Religio Medici. By Sir Thomas Browne, Physician. Being a Facsimile of the First Edition published in 1642. With an Introduction by W. A. Greenhill, M.D. Oxon. pp. 190.

WESTFIELD, F., High Wycombe; KENT & Co., London.
A Handbook of Diseases of the Liver, Biliary Passages, and Portal Vein. By H. Ruckley, L.R.C.P. Ed. &c. pp. 220.

Choléra d'Egypte en 1883, rapport addressé à S. E. le Ministre du Commerce, par le Dr. Chaumery.—Medical and Other Uses of Carbolic Acid; compiled by F. C. Calvert and Co., Manchester.—Wine in the Different Forms of Anæmia and Atonic Gout; by M. E. Bégin.—Sulla Sclerodermia degli Adulti; del Dott. G. Nicolich.—Etudes Expérimentales sur la Contagion de la Fièvre Jaune; par le Dr. D. Freire.—Relation of Eye and Spinal Diseases; by A. Friedenwald, M.D.—English Dates in Rhyme; by E. E. Griffin. (Wyman.)—Die einfache chronische Exsudativ-Peritonitis; von Dr. H. Vierordt.—The Educational Almanack, 1884.—Aids to Practical Physiology; by J. B. James, M.R.C.S.—Surgical Treatment of Tumours and other Obscure Conditions of the Bladder; by Walter Whitehead, F.R.C.S.E., and Bilton Pollard, M.D.—Water, Preventable Disease, and Filtration; by P. A. Maignen.—The Therapeutical Value of Nerve-stretching in Tabes Dorsalis; On Penetrating Wounds of the Bladder; Contributions to the Operative Surgery of the Tongue, Jaws, and Palate; by Prof. Wm. Stokes. (Falconer, Dublin.)—A Strange Life; by Nemesis.—Die Epidemische Verbreitung des Scharlarchfiebers in Norwegen; von Dr. Axel Johannessen. (Dybwad, Kristiania.)—The Clergy and Vivisection; by Mark Thornhill.—Artistic Voice in Speech and in Song; by Charles Lunn.—Tom Dixon's Turkey; by Mrs. Gilbert Dustin.—Man Physically, Mentally, and Spiritually Considered; by B. C. Garratt.—Die Nahrung der Japaner; von Dr. B. Scheube.—Lichen Ruber and Lichen Planus; by A. R. Robinson, M.B.—The Lark, Imperial Review, October.—The Encyclopædic Dictionary. Part I. (Cassell & Co.)

Medical Diary for the ensuing Week.

Monday, Jan. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Second Lettsomian Lecture: Mr. R. Brudenell Carter, "On Modern Operations for Cataract."

Tuesday, Jan. 22.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. S. Poole, "On Coins and Medals."
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Annual General Meeting: Confirmation of the Minutes, Appointment of Scrutineers of the Ballot, Treasurer's Financial Statement, Report of Council for 1883, the Presidential Address, Report of Scrutineers, and Election of Council for 1884.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Dr. Charles L. Roy, "On the Arterial Blood Pressure and the Mechanisms which Regulate it in Health and Disease."—Mr. Walter Whitehead (of Manchester), "On a Case of Spina Bifida cured by Operation."—Mr. Victor Horsley, "On the Pressure of the Nerves of the Perineurium."

Wednesday, Jan. 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.—Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.
HUNTERIAN SOCIETY.—8 P.M. Mr. T. Mark Hovell, "On Laryngeal Web following Syphilitic Ulceration."—The President (Mr. W. Rivington), "On Two Cases of large Calculi treated by Lithotomy." Mr. Poland, "On a Case of Ruptured Intestine."

Thursday, Jan. 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
ROYAL INSTITUTION.—3 P.M. Professor Pauer, "On Music for the Pianoforte," &c.

Friday, Jan. 25.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. H. H. Johnston, "On Kilima-njâro, the Snow-clad Mountain of Equatorial Africa."
CLINICAL SOCIETY OF LONDON.—Mr. Rivington: 1. "On an Unusual Form of Dislocation of the Hip." 2. "On a Wound of External Carotid by a Stab in the Parotid Region; Recurrent Hæmorrhage; Temporary Ligature of Carotid Trunk combined with Ligature of the External Carotid at the Seat of Injury."—Dr. Donald Hood, "On Angina Pectoris immediately followed by Pericarditis."—Dr. de Havilland Hall, "On Empyema followed by Abscess of the Brain."

Saturday, Jan. 26.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Morley, "On Life and Literature under Charles I."

TIGHTLY BOUND

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Jan. 17th, 1884.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Jan. 12	30·42	N.W.	39	37	..	45	35	..	Overcast
,, 13	30·40	W.	44	42	..	47	37	..	Cloudy
,, 14	30·47	W.	44	42	..	52	41	..	Overcast
,, 15	30·59	N.	49	47	..	53	42	..	Overcast
,, 16	30·66	N.E.	40	40	..	44	39	..	Foggy
,, 17	30·64	W.	42	41	..	44	39	..	Overcast

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE NEED OF SPECIAL TREATMENT FOR THE "NERVOUS."

IN Professor Gairdner's paper, which appeared in our columns last week, will be found a reference to a case in which he deeply regretted his inability to place a patient under treatment for refusal to take food because the "specialist" would not certify her. No blame attaches to the "eminent English specialist consulted." He acted in a perfectly legal manner. The fault is the fault of the law. There is only one way to get over the difficulty—namely, to treat "nervous" cases *before* they become certifiable.

HYDATIDS IN THE AXILLA.

DR. J. K. BARNETT, of Tintaldra, Victoria, reports in the *Australian Medical Gazette* of November a short account of a case in which he removed from the axilla of a robust man a large number of hydatids. The wound was injected with iodine solution, and healed in ten days.

THE LEEDS "TRANCE" CASE.

To the Editor of THE LANCET.

SIR,—As a case of "supposed death" or "trance" has gone the round of the papers during the last few days, and as many of the accounts are either incorrect or exaggerated, I enclose you the first paper containing the account from which all the others have been copied directly or indirectly.

The girl had some convulsions about six weeks ago of an epileptic character, but not very strong, although repeated very frequently for a few days, and latterly she has often fainted for a few minutes. She has lain during the whole of her illness in the cellar-kitchen near to a good fire, and it was whilst having her hands washed that she became stiff and cold. Three women saw her, felt for her pulse and watched for breathing, but could detect no sign of life. She was still in the warm cellar-kitchen for nearly two hours after her supposed death, before being washed and laid out; she was then placed in the cold bedroom on a coffin board, and within an hour had waked up as related in the papers. She is now in the last stage of acute phthisis, and cannot, I think, live many weeks. My own opinion is that she fainted from a little exertion, and probably also from the effects of an over-heated room; and when laid in the cold bedroom the blood was sent to the heart and lungs by the surface capillaries being contracted. Two questions arise—viz., (1) if kept in the warm stifling atmosphere of the cellar-kitchen, how long would she have remained in a state of suspended animation? or, would she have come round at all? (2) if cold affusions and fresh cold air had been supplied sooner, would she not have revived in a few minutes? I shall watch the case now very carefully to the end.

I am, Sir, yours faithfully,

G. HODGSON HIGGINS, M.R.C.S., L.R.C.P.

Beckett-terrace, Leeds Jan. 15th, 1884.

NOTES AND STATISTICS OF CINCHONA BARK.

A SECOND EDITION of a useful little book bearing this title has recently been published by Mr. John Hamilton, from which we gather the following facts:—In the year 1882 the imports into the United Kingdom amounted to 15,590,920 lb., against 14,040,006 lb. in the previous year. The total value of the imports for 1882, although upwards of 1,500,000 lb. more were imported, shows a diminution of £24,231. Of the different countries where bark is cultivated, Ceylon is by far the most important; but it is said that Bolivia, Java, and Southern India are making great efforts in the same direction. As an easy classification of the barks produced in the cinchona region of South America, Mr. Hamilton suggests the following:—(1) Officinalis (crown bark), or "black" bark, as it is described in Jamaica, rich in quinine; (2) succirubra, or, "red" bark, rich in cinchonidine; (3) Columbian barks, comprising (*a*) "soft" Suchas Columbian (C. lancifolia) and Carthagena (C. cordifolia), both rich in quinine, and (*b*) "hard" Suchas, Pitayo, rich in quinidine, and Cuprean, although not a true cinchona, containing quinine, quinidine, cinchonine, and the new alkaloid cinchonanine in some cases; (4) Huanuco (C. nitida, C. micrantha, and C. Peruviana), or "grey" bark, rich in cinchonine; and (5) Calisaya, or "yellow" bark, very rich in quinine, and containing a little cinchonine.

G. H. Q.—The cramp complained of is evidently due to muscular exhaustion, and violent exercise involving great strain should not be indulged in. Football is out of the question.

DEATH FROM INJURIES INFLICTED WHILE UNDER DELUSION.

To the Editor of THE LANCET.

SIR,—I desire to place on record the following case:—On Saturday, Dec. 6th, I was summoned to see Mrs. M——, aged thirty-four, who, I was informed, had "cut her bowels." On arrival I found her in bed, having with a razor laid open her abdomen and uterus and plucked out a fully grown male child. A considerable portion of intestine protruded, but was uninjured. Her abdominal wound measured a trifle more than five inches, and extended from an inch above the umbilicus, perfectly straight downwards. The uterine wound engaged the upper third anterior surface and the entire fundus. Three hours had elapsed since the occurrence. There was no bleeding, and the uterus was firmly contracted. The child lay dead in an adjoining room with the cord cut across, but not ligatured, and also the placenta. There was a superficial wound about two inches long on the right buttock of the child. The placenta, with the membranes, was intact, and showed no evidence of having been cut into. She died from peritonitis thirty hours from the time of the infliction of the injuries. The woman was not of sound mind for some four or five years previously. The delusion she was labouring under was that she thought the means she adopted the quickest way in which to obtain relief from her labour pains. She so expressed herself to me. This was her seventh confinement, and all her previous labours were easy. Her condition of mind put the idea of death from shock out of court, and the facts of her having removed the placenta and of the existence of a firmly contracted uterus must have obviated in a great measure danger from hæmorrhage. Judging from her appearance and pulse, the quantity of blood lost could not have been great. There was no post mortem allowed on the child. Assuming it was born alive, I am inclined to attribute its death to the fact of the cord not being ligatured, aided by exposure, as her neighbours, frightened by the awful sight, ran away, and it was not until the clergyman arrived (more than an hour afterwards) that anything was done. During that time the child lay quite naked on the bed. As regards treatment, for duty's sake I cleansed out as well as I could the cavity of the peritoneum, brought the wounds into accurate apposition, and covered them antiseptically. Any of your readers who may desire further information on any point I may have omitted, I shall be only too happy to communicate with.—I am, Sir, yours, &c.,

Kilrush, Dec. 18th, 1883. B. MADIGAN, L.K.Q.C.P.I., &c.

Dr. C. R. Illingworth.—We do not see anything novel in the proposal.

Mr. Chas. Slater.—Very soon.

"THE ST. PANCRAS FEMALE ORPHANAGE."

To the Editor of THE LANCET.

SIR,—The Rev. Dr. Burns is associated with the medical profession in his philanthropic work, and therefore ought to have known the fact (officially ascertained) that the recent typhoid epidemic was caused by country milk-supply; and therefore if, instead of insinuating that the trustees of the St. Pancras Female Orphanage were neglectful of sanitary arrangements, he had pointed out the necessity for improved county government, he would have exhibited more charity and a better knowledge of essential politics. It was furthest from my intention to "attack" the Temperance Hospital, and the Rev. Doctor is not justified in drawing such an inference, as I only indicated, with a thankful spirit, the successful treatment of our girls sent to the London Fever Hospital, and with the avowed object of pleading for assistance to the charity, which has suffered in finance (only) by the recent epidemic. Allow me to assure the Rev. Doctor that the sanitary arrangements of the Orphanage have always been efficient and approved by professional authorities. I remain, Sir, yours faithfully,

CHARLES WORRELL,

Jan. 1884. Hon. Sec., St. Pancras Female Orphanage.

A TRIP THROUGH THE GREAT NORTH-WEST.

DR. EDMUND C. WENDT, of New York, has published in pamphlet form his notes on a trip to the Great North-west, which appeared during the last three months of 1883 in the form of letters to the *Medical Record*. A keen observer and an ardent admirer of nature, Dr. Wendt has not confined himself to the purely professional aspects of the districts he visited. In reference to Minnesota, he remarks on the conspicuous absence of very old persons. In explanation of this is alleged the fact that working with half-power is a thing unknown; all faculties are enlisted, all energies constantly strained to accomplish the chosen task of life. What wonder, then, that nature's stock of reserve force is early exhausted, and a sudden complete collapse is the rule rather than the exception. The volume concludes with a few words about the Yellowstone National-park, the medical aspects of which Dr. Wendt hopes will soon be published.

Insomnia.—Chloral is, from its chemical constitution, a body intrinsically prejudicial to health. It is very capricious in its action, the same dose one day causing only sleep, on another, it may be, death. It has many of the poisonous qualities of other narcotics. It gives rise to gastro-intestinal irritation, and lowers the temperature of the body. It is far more dangerous than alcohol, and immeasurably more so than either tea or tobacco. (See THE LANCET, vol. ii., 1875, pp. 825 and 898.)

Philo Medicus.—It is very seldom that recovery occurs after a temperature of 107° in fever, but a much lower range of long-continuance of pyrexia is equally dangerous.

"SCARLET RHEUMATIC FLANNEL."

To the Editor of THE LANCET.

SIR,—The frequency with which the question of the alleged contamination of certain artificial organic colouring matters with arsenic is being discussed in medical journals affords an interesting instance of the obstinacy with which prejudices and errors, once popularly received, cling to life. In the early days of the so-called "aniline colour" industry (a misnomer, because but exceedingly few colouring matters are nowadays made from aniline itself) the then most important colour (magenta) was obtained by the action of arsenic acid upon aniline, and when the processes of purification of the lower qualities were carried out, but inefficiently, a little arsenic was to be found in the colour, and possibly even in the violet and blue derivatives, which took their starting-point from magenta.

The arsenic process has, however, long been driven out of the field by more economical processes, in which the use of arsenic acid or any other compound of arsenic is entirely dispensed with. At present there is—in Germany at least, that country furnishing by far the greatest proportion of the supply of organic colouring matters—not one factory of note which still employs arsenic. Bright-red and scarlet colours especially are innocent of arsenic, not being magenta derivatives at all, but either azo, nitro, or alizarin colours. It is quite possible that some of these colours are either injurious to health as such, or capable of yielding, by decomposition, irritating compounds such as nitrous or nitric acids, to which the unpleasant effects not rarely noticed with scarlet materials are due. But to look for arsenic in such fabrics, and especially by a test to which so strong objections can be taken as that described by your correspondent, Mr. J. Woodland, is, as long experience has shown me, merely a waste of labour.—I remain, Sir, yours obediently,

OTTO HEHNER,
Hon. Secretary of the Society of Public Analysts.
Billiter-square, London, Jan. 5th, 1884.

A Neighbouring Practitioner.—To reproduce the announcement would be simply to increase the publicity the advertising gentlemen desire.

Mr. Alfred Allen.—We cannot at present add to our list of exchanges.

M.R.C.S. Eng.—No.

INQUEST UPON THE LATE MR. W. ROBERTS.

To the Editor of THE LANCET.

SIR,—With regard to the inquest upon the late Mr. E. W. Roberts, of Guy's Hospital, kindly permit me to state that you were, as you opined, imperfectly informed, since the medical evidence showed that the cause of death was due to failure of the heart's action. This was owing to the dilatation of its cavities, which rendered the valves inefficient, the distension of the stomach being probably the immediately exciting cause of the failure of the already diseased heart. The autopsy showed considerable enlargement of the heart, that organ weighing twenty ounces. The ventricles were much dilated. The mitral valve allowed water to regurgitate freely from the ventricle; the left auricle was considerably hypertrophied, especially the appendix. As regards the statement that the deceased "enjoyed excellent health," all I can say is that four years ago he consulted one of the physicians at Guy's Hospital, and was treated for palpitation and irregularity of the heart's action. The organ at that time was found to be enlarged, and was considered to be organically diseased. His landlady in her evidence stated that he had frequently complained of his heart, and a short time previously, I understand, he had an attack of syncope.

I remain, Sir, yours obediently,

L. A. DUNN, B.S., M.B. Lond., &c.,
January 14th, 1884. Senior House-Physician, Guy's Hospital.

EFFICACY OF VACCINATION.

Mr. A. Andrew.—The most recent information on the subject will be found in (1) Dr. Buchanan's preface to the "Supplement by the Medical Officer to the Eleventh Annual Report of the Local Government Board for 1881;" (2) a memorandum at page 40 of the same volume; (3) an extract from the Forty-third Annual Report of the Registrar-General, giving a table showing the mean annual deaths from small-pox per million living (a) at all ages, (b) under five years; (4) an excellent memorandum on Vaccination by Mr. Sweeting, issued by the Metropolitan Asylums Board, in March, 1882; and (5) a paper read last year by Dr. Guy, F.R.S., on small-pox mortality, before the Statistical Society.

A Subscriber.—We shall be glad to receive the history of the cases before answering the questions.

DEATH FROM ASPHYXIA IN AN INFANT.

To the Editor of THE LANCET.

SIR,—As the following case may prove of interest to some of your readers, I shall be much obliged if you will be kind enough to insert it in your journal.

On Monday, Dec. 10th, at 6 P.M., E. D——, an infant, was brought to me at the dispensary by her mother, who stated she thought the child was dead, but did not know for certain. On examining the child I found life to be extinct. Upon questioning the mother the following was the history I elicited from her—viz., that the child was one of twins aged seven months. She suckled it at 3 o'clock, and laid it down on the bed asleep, apparently then quite well. Two hours afterwards she went to look at it, and found it in the condition she brought it to me in. The child had never suffered from fits or any disease. It was poorly nourished and feeble. On making a post-mortem there was to be seen a quantity of coagulated milk lodged round the orifice of the glottis, and upon opening the trachea I found milk extending as far down as the bifurcation of the bronchi. The œsophagus showed also the presence of milk, thus proving that during life some of the milk must have regurgitated from the stomach into the mouth and trickled back into the larynx, thus causing death through suffocation. I may also add that the lungs and brain were congested, and the right side of the heart was full of blood. Believing this cause of death to be somewhat unusual, I should be glad to know of any similar cases which your readers may have met with in their practice.—I am, Sir, yours obediently,

C. STORMONT MURRAY,
House-Surgeon, Western General Dispensary,
Jan. 6th, 1884. Marylebone-road.

LABURNUM POISONING.

To the Editor of THE LANCET.

SIR,—As I have during the past few months been called in to four cases of laburnum poisoning, followed by recovery, and as the symptoms (in all my cases alike) differ materially from those described under the above heading in your issue of the 22nd inst., I send you particulars of one of them for the benefit of your readers.

On Aug. 2nd, I was called about 8 P.M. to visit a little boy, aged three years, who was found vomiting about half an hour after being put to bed (7.30 P.M.) I was informed that he was suspected of having eaten some laburnum seeds. This proved to be correct, as we found the little fellow's only pocket crammed with pods, and the seeds were to be seen in the vomit, and he told us afterwards that a big boy had given them to him, saying they were nice to play with, but not fit to eat. The little fellow complained of pain in the stomach and great thirst; he was sick, his face was drawn and pinched, there was great pallor and coldness of lips, face, and whole body, with clammy sweat, respiration hardly discernible, no pulse at the wrist, the heart's action laboured and irregular, the pupils largely dilated and hardly susceptible to light, and the patient quite conscious, but very drowsy.

The treatment adopted was a stimulating emetic, wrapping the patient in blankets and applying heat to the surface of the body before a good fire, and giving small doses of carbonate of ammonia alternately with brandy. I am, Sir, your obedient servant,

Forest Hill, Dec. 28th, 1883. W. B. S.

PROVINCIAL HOSPITALS.

To the Editor of THE LANCET.

SIR,—Permit me through your columns to ask for information upon a point of great practical importance to us here. I wish to learn what is done in provincial towns where there is no resident physician, or no one willing to undertake the duties of physician to the local hospital. The number of such towns must be increasing, as railway communication tends to bring people to London for consultations. In such cases, are general practitioners invited to become medical officers? and are the "medical" and "surgical" sides of practice kept distinct, or merged together, as I believe to be commonly the case in French Hospitals?

If anyone will favour me with a reply to this inquiry, I will lay the communication before our hospital committee.

I am, Sir, yours faithfully,

JOHN W. IRVINE.

St. Mary's Rectory, Colchester, Jan. 9th, 1884.

*** In such a case, the usual custom is to appoint practitioners as visiting or acting medical officers, each to take charge of medical and surgical cases as they arise, and no distinction between them is made.—ED. L.

IRREGULAR DEATH CERTIFICATION.

Mr. R. C. Pritchard.—If our correspondent will carefully ascertain all the facts and state them in a letter, we shall be happy to give it insertion. The address of the distant surgeon who certified death in a patient he had never seen, and the action of the registrar, with any explanation he might have to give, are important. The case is a serious one, and requires notice.

AROMATISED COD-LIVER OIL.

MESSRS. BULLOCK & CO. ask us to state that this article, to which reference was made in our issue of the 5th inst., is not a proprietary one, the formula for its preparation being, cod-liver oil one ounce and oil of cinnamon five minims.

Parish Doctor.—The case in which it was decided that the School Board is liable for the cost of a medical certificate was heard at the Southwark Police-court, on Feb. 18th, 1882 (see THE LANCET, Feb. 25th of that year).

Post-Mortem.—As the medical officer in charge of the patients, our correspondent has the power under the conditions mentioned.

P. M.—From £60 to £100.

"ADVERTISING DENTISTS AND THE COLLEGE OF SURGEONS."

To the Editor of THE LANCET.

SIR,—A letter in this week's LANCET, signed "Anti-Humbug," calls attention to a very unprofessional advertisement at a railway station of a dentist who puts his diploma in full after his name. You, Sir, add a very pertinent comment, to the effect that the College of Surgeons has more power perhaps than it exerts; but with regard to the statement that this class of advertising will lead to the demoralisation of the dental section of the medical profession, I would venture to put in a disclaimer, to the effect that, during the five or six years I have served on the Council of the Odontological Society, we have never had a single complaint, in my recollection, of an unprofessional advertisement by a L.D.S. who has gained his diploma after fulfilling the curriculum of the College of Surgeons. The Odontological Society requires all its members to be diplomée and non-advertising, and the inference I desire to draw is this: that, as the dental diploma can, in future, only be obtained after four years' study and an examination, instead of being demoralised, we shall find a race of men spring up with a strong feeling of *esprit de corps*, amongst whom the debasing form of advertising will be as much deprecated as it is now by those members of our profession who have fairly won their diplomas after four years' honest study, as distinguished from some of those who have merely obtained diplomas granted by certain Colleges, after an examination, to all and any dentists who happened to be in practice before the passing of the Dentists Act of 1878.

I am, Sir, yours faithfully,

Brook-street, Jan. 13th, 1884. S. J. HUTCHINSON.

Omega (York) might try gentle friction with belladonna ointment, and, failing that, equal parts of belladonna and mercury ointments might be used.

Mrs. Mary H—— must be guided by the advice of her medical attendant.

Cam.—Yes.

POISONING BY CARBOLIC ACID.

To the Editor of THE LANCET.

SIR,—I have recently had under my care a child two years old who had swallowed four drachms of 30 per cent. crude carbolic acid. The child has made a complete recovery. Will any of your readers kindly inform me of any case on record in which so large a quantity was taken without a fatal result? I am, Sir, your obedient servant,

January, 1884. F. H. O.

ERRATUM.—In the list of 5s. donors to the Bower and Keates Fund, published last week, for "E. Cook," read E. Crew.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Gairdner, Glasgow; Dr. E. C. Wendt, New York; Dr. B. Schenbe, Leipzig; Mr. Francis Vacher, Birkenhead; Mr. Walford; Dr. Adam, Malling-place; Dr. Whitson, Glasgow; Dr. Steavenson London; Mr. Cadge, Norwich; Mr. L. A. Dunn, London; Mr. Dalby, London; Dr. Collins, Nottingham; Dr. Bateman, London; Mr. Illingworth, Clayton-le-Moors; Dr. John Ward, Sutton Coldfield; Mr. Blackett, London; Mr. Knight Treves, Margate; Mr. Gibson, Manchester; Mr. Davy, London; Mr. Alfred Allen, Bath; Mr. Higgins, Leeds; Mr. Hemsted, Southampton; Mr. Edgar Bruce, London; Mr. White Wallis, London; Mr. T. A. Warburton; Dr. Prichard, Glasgow; Dr. Eddison, Leeds; Dr. Paul, Liverpool; Mr. C. Stormont Murray, London; Dr. Strahan, Northampton; Dr. Woodman, Southernhay; Dr. Fletcher Beach, Darenth; Dr. M'Bride, Wigstown; Dr. Grant, Bromsgrove; Mr. H. B. Tait, London; Messrs. Boulton and Paul, Norwich; Mr. G. E. Jeaffreson, Framlingham; Messrs. Taylor and Co., Liverpool; Mr. Graham, London; Mr. Pollard, Edinburgh; Mr. Elliott, Chichester; Mr. Bullivant, Derby; Messrs. Keith and Co., Edinburgh; Mr. Worrell, London; Mr. Evans, Bournemouth; Dr. Oliver, Toronto; Mr. Maythorn, Biggleswade; Rev. J. Campbell, Iona; Dr. Hopkins, Pontypridd; Mr. Lake, Mitcham; Mr. Gillespie, Castle Carey; Mr. Macmillan, Blackheath; Mr. Nalder, Falmouth; Mr. Armstrong, Manchester; Mr. Robertson, Liverpool; Mr. Webb, Bury; Messrs. Christy and Co., London; Mr. Kynaston, Folkingham; Mr. Laws, Alston; Dr. W. K. Burton; Dr. Burney Yeo, London; Mr. Berry, Wigan; Mr. J. F. Little, Ben Rhydding; Mr. Rimmel, London; Dr. Robertson, Buxton; Dr. H. R. Bigelow, Washington; Mr. Reginald Harrison, Liverpool; Dr. Diver, Kenley; Mr. Hulke, London; Messrs. Bullock and Co.; Messrs. Deane and Co., London; Dr. Prendergast, Leek; Mr. Wernich, Edinburgh; Mr. Robinson, Sheffield; Mr. E. East, London; Mr. Puzey, Liverpool; Mr. Forrest, Brandesburton; Mr. Ordish, London; Mr. Russell, Macclesfield; Mr. Bedford, London; Mr. Maltine, Shepherd's-bush; Mr. Whilis, Belfast; Mr. White, Wolverhampton; R. C. P.; M.R.C.S. Eng.; J. L.; F. H. O.; G. H. Q.; A Neighbouring Practitioner; Eustachian Tube; General Practitioner; F. G.; Post-Mortem; A Subscriber; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Strong, New South Wales; Mr. Damant, Cowes; Mr. Andrews, St. Austell; Mr. Jones, Sheffield; Mr. Clarke, Manchester; Mr. Storey, Stroud; Mr. Bate, Huddersfield; Dr. Henry, Hazelmere; Mrs. Markham, Portsmouth; Dr. Fulton, Toronto; Messrs. Corbyn and Co., London; Dr. Sutherland, Castleton; Mr. Caldwell, Shotts; Mr. Swale, Leeds; Mr. Willis, Birmingham; Mr. Man, Bradford; Mr. Hogg, London; Dr. Clarke, Folkestone; Mr. Heaven, Folkestone; Madame Boyeau, Paris; Mr. Grime, Blackburn; Messrs. A. and C. Black, Edinburgh; Mr. Brentnall, Middlesborough; Dr. Smith, Belfast; Mr. Spilsbury, Bathurst; Mr. Shute; Mr. M'Dougall, Auchnacraig; Mr. Willis, Birmingham; Mr. Joyson, Northwich; Mr. Candlish, Balfron; Dr. Watters, Stonehouse; Mr. Forbes, Drumlithie: Mr. Stickland, Kensington; Dr. Walker, Brierley-hill; Mr. Edwards, Llanfyllin; Mr. Atthill, Faversham; Mr. Cole, London; Mr. Baker, Clapham; Messrs. Picton and Co., Pellhell; Dr. Davies, Sherburn; Mr. Wippell; E. P., Tutbury; Sigma; Finedon; Chirurgicus; W., Rotherhithe; A., Pontypool; Verax; Z. Z.; L. S. A., London; Zeta, Folkestone; G.; R. L. M.; Sigma, Brighton; H. L.; Bona Fide, Lymington; Mater, Brighton; Vindex, Ulverstone; L. A. W.; Medicus, Over Darwen; Medicus; B., Bath; Londinensis; Epsilon; Lady Superintendent, Cambridge; &c., &c.

Galloway Gazette, Fife Herald, Bristol Mercury, Oxford Chronicle, Herts Advertiser, Liverpool Echo, Dover Express, Wynberg Times, &c., have been received.

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Every additional Line	..	0	0 6
Front Page per Line		0	1 0
Quarter Page	..	1	10 0
Half a Page	..	2	15 0
An entire Page	..	5	5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris